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Keep an open mind

THE TECHNIQUE OF CONSCIOUS EVOLUTION

THE TECHNIQUE OF CONSCIOUS EVOLUTION

Incorporating

SELF AND SUPERMAN

By

L. E. EEMAN

Author of
Co-operative Healing, *How Do You Sleep?*, and
The Sub-Conscious made Conscious

Translator of
The Prediction of the Future
(from the French of P. E. Cornillier)

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The complete work first published in 1956 *incorporates* "SELF AND SUPERMAN", *revised and considerably enlarged, and gives, in unexpurgated form, the whole of the author's original argument and philosophy.*

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TO

MY MISTAKES

AND MY MISDEEDS

THIS BOOK IS

DEDICATED

In the book which follows I endeavour to outline a principle and a method rather than to argue the pros and cons of that principle and method. Readers may rest assured that I do not indulge irresponsibly in statements, however startling they may appear on the surface, and that I have abundantly demonstrated in my own work the best of all proofs of the efficacy of that principle and method—that they work.

L. E. Eeman.

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INTRODUCTION

CONFESSION is good for the soul.

In the first world war, after some months as an infantry officer, I had joined the Royal Flying Corps and seen service with them in Egypt, Darfur, Salonika and France. In Salonika I had contracted dysentery and malaria which, amongst other things, had affected my heart (functionally, as I later discovered) so that, as a pilot, I could no longer be entrusted with the lives of my brother officers. But I loved flying, and since it was the only job for which I was still physically fit, whatever might be happening to my nervous system, I gave up a temporary post at the Air Ministry to fly single-seaters at night in the London Defence. This was not a wise course from a health point of view, but, no doubt, 'it had to be' and its consequences were not all regrettable. My heart and nerves got progressively worse, which I accepted in a dull fatalistic mood significant of nervous exhaustion, and, finally, my misfortunes, which included a night crash in the fog, sent me to hospital on the 22nd March 1918, a hopeless physical and nervous wreck. When I was eventually discharged on the 4th August 1919, my papers were marked: '100 per cent disability, permanently unfit for any duty', and I was granted a 100 per cent PERMANENT pension. Yet, although this official assessment of my condition meant that I had broken down completely, and incurably, not only physically and nervously, but also mentally, my 'permanent' PENSION WAS CANCELLED WITHIN TWO YEARS of my discharge from hospital. What had happened between March 1918 and July 1921 to cause this 100 per cent reversal of official medical opinion?

One cannot believe that the 'Northcliffe Economy Committee' had persuaded honourable specialists to deprive helpless war victims of pensions which were justified, and

I agree both that I had been 100 per cent, that is physically, nervously and mentally, disabled (and in the eyes of official medicine, incurably so) and that within two years I had recovered 100 per cent, physically, nervously and mentally, and this, not only in the eyes of official medicine, but in fact also.

However, I underline that my recovery had taken place between my discharge from hospital on the 4th August 1919, and the summer of 1921, that is, whilst I was no longer receiving any official medical treatment but was, instead, using techniques which I had begun to evolve whilst still in hospital, and which to-day, that is in 1956, are even more effective than they were in 1919, because of thirty-seven years of constant practice and development.

One of these techniques, that of conscious relaxation of muscles, nerves and mind, was born as a result of what I can only call a providential accident which I cannot date accurately but which must have happened between December 1918 and March 1919. I was then in my third hospital, and the effects of dysentery, malaria, war flying, a head injury, disorderly action of the heart, more or less constant and intense pain in the spine and back, and persistent insomnia, were upon me. I was so depressed that I made three attempts at suicide, one of which all but succeeded. It was then that a panel of eminent physicians, known as 'Lord Knutsford's Committee' visited our hospital. The two leading neurologists of the day, Sir Maurice Craig and Sir Percy Smith, approached my bed and Sir Maurice held and pressed my left forearm and Sir Percy my right. Whilst I was too weary to care whether I lived or died, they stood there wrapt in thought. Suddenly, they spoke, absolutely together, and Sir Maurice said: 'Very high tension, don't you think?' and Sir Percy: 'Very low tension, don't you think?' I said nothing, but thought: 'Ah, that's my left shoulder!' It had been damaged in an air crash following engine failure as far back as December 1915. The two great specialists changed places; then once again, and then they agreed that my tension 'was LOW on BOTH sides'. But Sir Maurice was sure 'it HAD been high the first time, although there was no doubt that it was low now'.

Before they left I was certain that both gentlemen had been right on every occasion, and that the tension in my left arm had not only fallen unconsciously and in a flash, but that it had fallen only because the two great neurologists had, unseeing, enlightened me. They had unconsciously MADE ME conscious of the fact that I had lived for three years in unconscious high neuro-muscular tension in my left arm and low in my right, in subconscious memory of a consciously forgotten physical injury. More, the mere consciousness of this imbalance of tension had not only brought back to conscious memory the accident of December 1915 which had caused it, but it had at the same time triggered-off the healing of the subconscious complex associated with it. More important still, it had reminded me that psycho-analysts had used 'free association' with me in the hope of making me aware of my complexes so that the nervous, muscular and organic inhibitions caused by them might be removed. But free association had not only been slow, indirect and haphazard, it had not even made me realize, let alone overcome, the unconscious neuro-muscular 'escapism' from pain which, for over three years, had prevented the healing of my shoulder. And now, out of the blue, comes a 'blind' diagnosis which by accident, firstly, makes me aware of my unconscious neuro-muscular tensions; secondly, removes them; thirdly, makes me aware of their causative complex; and fourthly, releases my inhibited healing forces. All this, in one move, simple, instantaneous, direct, specific, and as years of practice have since shown, this same simple technique still produces the same specific results whether a complex has originated in a physical trauma or a neuro-muscular inhibition in a complex.

The process is psycho-analysis in reverse, as it were, and it is so specific that it warrants the use of the term 'Specific association' in contrast to the haphazard and erratic 'Free association' of psycho-analysis, and it is so direct that it achieves its results in a fraction of the time taken by analysis, as has been frequently commented on by patients who had had experience of both methods. Those readers who are interested in a technique which I have labelled 'Myognosis' should read *Co-operative Healing*, and in parti-

cular Chapters 7 'Relaxation and Analysis', 8 'Myognosis', and 9 'Emergence'.[1]

Naturally, I not only used *the new understanding* I had received, but I also endeavoured constantly to deepen my insight into my disability and to advance my overcoming of it by every means which I could *understand*. In May 1919 my efforts were rewarded by a number of new observations and discoveries, which I need not retail here, but which I immediately put to good purpose. The effect was that my wife, who because of my acute depression had been asked not to visit me more than once a fortnight, received from my fifth hospital, early in June 1919, a letter which told her that I had recently improved so much that she could now call as often as she was able to come to London. On arrival at the hospital she was taken to the Commanding Officer, who reminded her that from March 1918 to May 1919 my depression had hardly shown any improvement at all, but that now, for some entirely unknown reason, I had suddenly shot up from the depths of depression right through the normal line to a point dangerously above it. When she asked that I might be allowed to come home to the country since I was so much better, she was told that they 'wished to keep me under observation for some two or three months more because I was suffering from an unnatural sense of well-being'. When this diagnosis was repeated to me I found that it rested on the evidence that Matron and nurses frequently heard me sing and whistle. However, I felt it might have caused trouble if I had suggested that if anyone who had suffered from uncontrollable depression for fourteen months had, entirely unaided, discovered a technique, however unorthodox, for the easy control of his gloom, he might have been excused for feeling somewhat relieved and even elated. So, I merely toned down my musical endeavours and on occasions considerately hummed Chopin's Funeral March, though I never found out whether or not it was that which induced the hospital authorities to send me home within two months!

Once free, I pursued one purpose only: to make myself absolutely fit in body, nerve and mind in order to put the

[1] *Co-operative Healing*, by L. E. Eeman, (Daniel).

validity of my theories and techniques beyond doubt and so induce official medicine to investigate and, in time, adopt them. But I had to earn a living and keep my wife and two children. I weighed up everything and decided that getting fit must come first and that with a little capital, my R.F.C. gratuity and my pension, I could afford to lead an athletic open-air life for a year, and when fit, say in the autumn of 1920, look for work. I had played club tennis before the war, and although I was then 30, an age at which tennis players are usually past their best, even when they have not been gravely ill, I decided to take up the game, seriously, to practise for hours every day, to build up my wind, stamina, and self-control, after which I would compete in tournaments. When I felt ready, I entered for all events, open and handicap, week after week, but although this was excellent training my handicap remained as low as 'plus 30 second class' for a long time. However, I persevered, and before I was 35 I had worked up to 'scratch first class' and reached Wimbledon qualifying standard. I had done so after having spent sixteen months in hospital, mostly on my back, and done it by using the same methods to build up my tennis as I had used before to regain my health, and which are described in this book.

My excursion into competitive tennis did not convince my medical boards that I had evolved a therapeutic technique worthy of investigation, as I had hoped it would, but in no time at all it did something which, though unpremeditated, proved decisive for my work and the spread of my ideas. At tournaments and championships it often happens that players sprain their ankles, strain muscles, rick backs or otherwise incapacitate themselves, and then have to scratch. This kind of thing happened at every tournament I joined, and, diffidently at first, I would approach the unfortunate player and ask him to give me an hour before finally deciding to scratch. Frequently, those who did so were normal again inside the hour, and when they were Davis Cup or other international players, these cures had a snowball effect and soon I was being consulted by increasing numbers of injured players. Then, several

letters a week began to reach me from people who, having heard of some cure, wanted to consult me, and so, the question of my looking for work never arose, for in a few months tennis had spontaneously produced a practice for me. Within two years I was so busy that a suburban house became inadequate, and in 1922 I took the consulting-rooms where I still practise.

After a time a demand developed for written instructions, and in 1926 I published *The Sub-Conscious Made Conscious*, a short manual which describes a technique for the promotion of efficient rest and sleep, and is still in use. Early in 1927 I began the present book, and finished it in the spring of 1928. It opened with an outline of the philosophy which I had evolved whilst still in hospital, for my own peace of mind and re-orientation; it then described therapeutic theories and techniques which have since been further developed and continue to give gratifying results. Amongst the notions which it supported with argument was the theory that hair, both in animals and men, performed in relation to the telepathic faculty, the function of the aerial in wireless.

I called the book *Conscious Evolution*, and when it was finished, I submitted it to a publisher of high repute who, in his desire to help me, went beyond the usual refusal slip and gave me the following advice, inspired by his medical reader: (1) the book should be condensed; (2) the argument about hair and telepathy was too far-fetched for any orthodox publisher and should be deleted; (3) after dealing with (1) and (2) above, I should publish the book myself and get my patients and followers to subscribe it.

I thanked my kind adviser, condensed the MS. by about 25 per cent and deleted the offending argument about hair. But Providence intervened before I had time to do anything about publishing the book myself. A new patient, A. C. Crossley, a tournament player of distinction whom I vaguely knew as a fellow member of Queen's, told me he had overworked and overplayed to such an extent that he had suffered a bad physical and nervous breakdown. Medical authorities had warned him that unless he gave up work and competitive tennis and retired to the country for

at least a year of complete rest, they could offer little hope of his recovery. After a few weeks' treatment he improved so much that he went back to work and tennis, the latter to such purpose that when he met the great H. Cochet at Wimbledon in 1929 he was beaten by only 6–3, 6–4, 6–3, a performance which experts rated highly, and after which Cochet went on to beat Borotra in the final.

When he last consulted me, on a Saturday morning, he thanked me for his recovery and then said: 'You know, you ought to write a book about this!' to which I replied: 'I have just finished revising the MS. of one.' He said: 'Can I have it over the week-end?'—'No, you can't, I am sending it to a publisher!'—'But I *am* a publisher. I am seeing our Chairman over the week-end, and if it suits our list I want him to bring your book out.'

When Providence steps in at the eleventh hour, one says 'Thank you', and Mr. Crossley left me before mid-day, with the MS.! He finished reading it that afternoon, then passed it on to his Chairman, who telephoned me on the Sunday evening. He said: 'My wife and I both like your book but we do not like your title, and we want you to cut out your first chapter; it is too mystical and would put average readers off. Then, write a short introduction and start with Chapter 2.' Although this meant deleting the only philosophy I had produced since College, I was so relieved at not having to bring my book out myself that I agreed on the spot. Within a few days I was correcting proofs and had accepted *Self and Superman* as the new title of the book, with 'the technique of conscious evolution' as a sub-title.

The book was well received and was reprinted within a few months, but soon I realized that I should never have agreed to delete either my philosophical introduction or my thesis about the function of hair. Neither should I have agreed to the alteration of title. More distressing, I felt that most of my failures since I had left hospital had been due to lack of moral courage, the quality I worshipped in others.

So here I have to confess that I should have had the moral courage:

Firstly: To have admitted that at the end of the first world war I had broken down physically, nervously AND

mentally. True, this might have induced the morally weak to have dismissed my arguments off-hand, but the strong would have known not only that both the admission of mental breakdown and the overcoming of it had demanded moral courage, but also that only a sound healing technique could have produced and sustained the required abundance of it.

Secondly: Not only to have ignored the possibility that mysticism might have put average (presumably materialistic) readers off, but to have weighed instead on the certainty that it would stimulate spiritually conscious minds of which there were even fewer in 1927 than there are in 1956. The chief difference between the scientific climates of these two years lies in the fact that, during the interval, materialistic Science has demonstrated by material means, that matter, the 'only reality', actually has no reality. Matter seems to be the appearance which energy in motion presents to certain organs which we can use only to perceive that appearance, and/or to equally unreal instrumental extensions of these organs. May I, in relation to the illusory aspect of matter, refer the reader to the end of Chapter 11 of this book, entitled 'Atoms' (pp. 157–66), where I suggest that Science might next discover that even energy itself actually has no reality, and that thought alone has.

Thirdly: Not only to have maintained my thesis that hair is the aerial wire of telepathy, but to have sustained this thesis with the argument that since the length of thought-waves might well equal that of the earth's equator, telepathy might take time and be subject to the law of the inverse square and yet appear timeless to a human observer. I should also have pointed out that the assertion that 'telepathy cannot involve radiation, since it escapes the law of the inverse square', is not only unproven but incapable of experimental proof, for: (a) we cannot time either the sending or the receiving of a telepathic message, and (b) if we claim that we can locate either the sending or the receiving mind at the moment of communication we affirm by implication that 'astral' or 'psychic' travel is impossible.

Repentance precedes confession, but penance follows it. So with my publishers' blessing, I now reinstate Chapter 1,

the philosophical self-reorientation born of my hospital-bed repentance, as originally written, and I suggest that those readers to whom philosophical and mystical considerations present little interest and those who seek only practical instruction in conscious self-development might begin with Chapter 4.

I would emphasize that the present book is more than a revised and enlarged edition of *Self and Superman.* True, the matter of that book remains, but only as a part of my whole original work.

Before closing I would give my warmest thanks to four good friends for their help in revising and producing this book:

Rowland Kenney, who for many years encouraged me to publish my original argument and fundamental philosophy uncensored;

C. W. Daniel, who recently passed on, to the great sorrow of so many, but not before he had given me the benefit of his long experience and deep understanding on many theoretical and practical points;

Denise Waltham, whose precise mind eliminated many ambiguities from my text; and

Mary Cameron, who, as my assistant for twenty-six years, has helped me to understand the psychological difficulties of many patients and to deal with these, both in my daily work and in my books.

L. E. Eeman.

24 *Baker Street,*
*London, W.*1.
March 1956.

Chapter 1

FUNDAMENTALS

You have a conscience.

Long acquaintance with it has induced you to credit it with two characteristics: sound judgement and incorruptibility.

You believe its message to be right, even though long refusal to listen to it has made its voice seem faint.

You know that interested bargaining, attractive excuses, specious argument, are all useless. It does not change its mind.

You realize that to act at all times, in every detail however trifling, in strict accordance with its every dictate, must eventually lead you to a state of perfection, mental, moral and physical, which far excels your present condition.

You know this state to be desirable. It has been your goal and aim from your earliest days and remains so now, though your consciousness of the fact may be vague and your knowledge of the way nebulous.

To equip yourself for the journey to that goal is no simple undertaking, to reach it no mean achievement.

You want Knowledge, knowledge of the goal, knowledge of the path, knowledge of yourself.

You want Intention, fierce determination, unquenchable thirst, undying desire to overcome. These are born only of

crystal clear realization of the supremely lovable and all-satisfying nature of the goal, the fruit of knowledge.

And you want Power, unlimited, always new, always fresh.

* * * * *

How do you become possessed of knowledge?

True knowledge reaches you through three channels only:

1. The senses.
2. Intuition.
3. Teaching.

All knowledge that reaches you through these channels is not necessarily true knowledge.

Experience is the sum total of the knowledge so acquired.

In what order do you acquire knowledge?
Go back to infancy, the order stands out quite plain.

You wake up to Life; you see or feel an object. It extends from here to there, where another object appears to begin. You become acquainted with Space, in two dimensions only, may be, but the embryo of the knowledge of Space is yours already.

Gradually it dawns on you through sight or touch that this object has depth as well as length and breadth. The third dimension has entered your ken. The whole of Space is there before you. How deep, how high, how wide? What comes next or above or beyond? You wonder. The problems of Infinity are there waiting for you.

Is that object there? And this other? You look again, and remember. You have seen them before, felt them before. That something between them, what is it? Time. Now. Before. After. How long before, how long after? What problems!

How long is now? Is it at all? And you, in the middle of it all, are you? Here and now? And these things, are they? Here and now? How much of you is they, how much of them is you? Are they real or unreal? You or not you? It is all so difficult! Object, Subject; Space, Time; Absolute, Relative; the puzzles that will be with you all your life are there already, bigger than you realize; and you wonder and you watch and you think.

* * * * *

And you wonder, and you watch, and you think.

You observe an object, somewhere in Space, at some time in Time. You observe a second object, somewhere else in Space, at some later time in Time. It then dawns on you that the two are connected in Time by something more than just time.

Not only did the first object appear first in Time and the second later, but the second only appeared because of the first and as an effect of it. The two are cause and effect. They are connected by more than time, they are connected by Law.

And as you wonder and watch and think, you evolve all by yourself, all for yourself, the Law of Cause and Effect. And when, later in life, a Master by your side reads out to you the Book of the Law, the words only are new to you, the Law you have known for such a long time.

The Law as you knew it came to you so simply, it was so natural; and the words of the Law sound to you so simple too, expressing as they do a thing so natural.

There is in Space or Time no thing, so big, so small, so old, so young, that had no cause before it.

There is in Space or Time no thing, so big, so small, so old, so young, but some effect will follow.

There is in Space or Time no thing, so weird, so strange, that did not suck its strangeness from its cause.

There is in Space or Time no thing, so weird, so strange, that will not leave its mark on its effect.

And all these things are true, you know.

As far as your eye can look, it will see Things, things with shape, and things with volume, and things with mass; things solid, liquid, and gaseous; the Earth, stones, plants and animals, the kingdoms Mineral, Vegetable and Animal; and beyond that, the peopled Heavens, the Stars and Suns and Satellites, and beyond that, things further still, that you can tell, must be, and must have been long before you can think.

And as far as your eye can look, it will see Work, the child of Force and Energy and Power; Work in the stone careering down the mountain side or rising in the spitting crater, work in the water clothing the earth in blessed rain or rising in the living spring, work in the air descending cold from up above or rising up from burning earth; work in the seed raising its branches heavenwards to bring to earth again decaying leaves that foster growth; work in the Stars, work in the Suns, work in the Satellites, and beyond that, work further still, that you can tell must be and must have been long before you can think.

And as far as your eye can look, it will see Order, the child of All-conceiving Thought; order in stone, the slave of gravity, order in water, obeying nature's chemistry, order in air, the toy of atmospheric pressure; order in seed and tree and branch and leaf; order in stars and suns and satellites, in their attractions and their pulls, in their orbits and their times; order even in apparent chaos; order, order, everywhere, always, as far as no end and as long as no time; Order and Law, the children of Intelligence, that you can tell must be, and must have been long before you can think.

Things, Work, Order; Matter, Force, Thought.

Kingdoms that extend so far, in Space and Time, that you can give to them no beginning or end, that definitions fail you; Kingdoms about which all you can assert is a denial of any limitation in the negative term of Infinity.

These things are strange to us in our smallness, but perfect do they seem in our greatness. But be they strange or perfect, they sucked these qualities from their cause We see them infinite, we must find Infinity in their cause, the Cause of causes.

Infinite Intelligence, the cause of all intelligences that were and are and will be; Infinite Force, the cause of all forces that were and are and will be; Infinite Substance, the material of all things that were and are and will be; the Holy Trinity of all creeds and eras.

The first requisite of the Infinite Cause must be the very necessity of its Being. It must be the Essential Being, the first essential of which is simply, Being.

Together with All-being must come the all-consciousness of Being. The mind cannot conceive the fullness of Being with the unconsciousness of it.

Together with All-consciousness must come the All-activity of the All-being. The mind cannot conceive the fullness of consciousness with the least inactivity.

All-being, All-knowing, All-powerful. God.

The activity of the Infinite must bear the mark of the Infinite. It must be controlled by Infinite Intelligence, unfolding an infinite plan, to an Infinite End, wielding infinite power, manifesting in infinite substance.

The only infinite plan to which God can work is Himself. He must by His very Nature work to His own Image. For Him there never was, never is, and never will be any choice in the matter.

The only infinite end to which God can work is Himself. He must by His very Nature bring all His work back to Himself.

The only power God can use is infinite power. That is, there is no power that can prevent any of his work going back to Him.

Thus, must Infinite Intelligence create, with Infinite Power, in Infinite Substance, and creating, It is the Infinite Manifest in finite manifestation.

Every single manifestation is finite in Space and Time.

Space and Time are the co-beings of manifestation. They cannot in any particular precede it, neither can they exceed it. Their being is relative to manifestation and they must dissolve with it.

God both precedes and exceeds Manifestation, Space and Time. His being is in no way involved in theirs. He is without them and yet manifest in them, indivisible, the whole of Him in every space in Space at any time in Time.

By His Nature He must endow every single manifestation with the inborn urge to portray, comprehend and attain Him; the urge to be, to be more fully, to have life more abundant; the urge to consciousness, to fuller consciousness; the urge to know 'the unknowable'; the urge to act, to act more fully, in every field, on every plane; the urge to be at one with Him, the urge to at-one-ment, the urge to be God.

When the day comes for manifestation to attain all-consciousness of the All-being, it will cease to manifest, and with it Space and Time will dissolve into the Infinite. Creation will be over.

This is not yet. And if it were, what then?

The Infinite by His Nature must manifest. Ever? There is no Ever, no Space, no Time. They just accompany any and all creations, they come and go with them. The Cycles must continue, Creation must go on, out of Him, back to Him. It leaves Him, knowing Him not and then goes back to Him only through the knowledge of Him.

It must leave Him with the minimum of manifest being, the minimum of consciousness of being and the minimum of activity.

Without creation, what? Intelligence unmanifest, Power in repose, Substance undifferentiated.

Within creation? Infinite Intelligence liberating Infinite Power generates activity in Infinite Substance.

Our present consciousness scientifically appreciates this activity as vibration in the Ether, the form through which we comprehend Infinite Substance.

This activity results in the differentiation of the Infinite Substance producing the manifestation we appreciate as Matter and of which vibration is the very essence.

Vibration bears four separate marks:

Velocity: that is the distance covered in Space by one wave of vibration in one second of Time.

Frequency: that is the number of waves of vibration that pass one given point in Space in one second of Time.

Wave length: that is the distance that separates the crest of one wave from the crest of the next.

Amplitude: that is the distance that separates a line traced from crest to crest, from a line traced from trough to trough.

These vary, theoretically, from Zero to Infinity, frequency varying in inverse proportions to wave length and amplitude, whatever the velocity.

In practice our senses only register vibrations, directly or vicariously, within limits liable only to narrow variations. Extremes of all kinds elude them completely.

Expansion of our means of Consciousness alone can widen our field of appreciation.

The End of Creation is the conscious perception of the Infinite by the whole of Creation.

The Power involved in Creation is Infinite: the conscious perception of the Infinite by the whole of Creation must come to pass: when Time is over.

Conscious perception implies Life; conscious life, increasing life, life increasingly conscious; activity, increasing activity, activity more and more abundant.

Creation is in Space and Time. Creation spaceless and timeless is a contradiction in terms.

Its whole trend is Change, unavoidable change, change without respite, in Space and Time. From unconsciousness to the full consciousness of the Infinite, God, outside Space, beyond Time.

Change for the better.

The irrepressible urge to change for the better is labelled Evolution.

Evolution, the urge to evolve, is the fundamental Instinct of Creation.

From Matter, generated by the differentiation of the Infinite Substance, Infinite Intelligence evolves Life.

From Life evolved in Matter, the Infinite Intelligence evolves Consciousness, the consciousness of Life, the Individual.

From Consciousness of Life, evolves Consciousness of Self and non-self, Subjective and Objective.

From Consciousness, Subjective and Objective, evolves the Law of Cause and Effect.

The development of the Law of Cause and Effect culminates in the perception of the Necessity of an Infinite Ultimate Cause.

The perception of the necessity of the Ultimate Cause leads to the perception of its necessity as an Infinite End.

The perception of the Infinity of the Ultimate Cause leads to the perception of its attainment by the whole of Creation through change as an unavoidable End.

The perception of its necessity as an unavoidable end leads to the perception of the necessity of the Ever-existence of the Means to that End.

The perception of the necessity of the Ever-existence of the Means to the Infinite End leads to the perception of the necessity of the eventual acquisition of the consciousness of the means to that End by the whole of Creation.

Here we stand. Here we have stood, stood for a very long time.

Yes, here we stand, with Consciousness wide, extremes of all kinds eluding us completely.

From Matter, Infinite Intelligence evolves Life, Life Consciousness, Self-consciousness, the Individual.

For what immediate purpose?

For the one, natural, obvious purpose: that the Individual shall have Life, that he shall live, that he shall live more and more, 'that he shall have Life more abundant', that he shall have and retain the indispensable means to the attainment of the full consciousness of the Infinite End.

For the one, natural, obvious purpose that he shall not die.

To credit the Infinite with the purpose of giving life to the individual so that he shall die, is to deny intelligence to Infinite Intelligence.

To satisfy the irrepressible urge to change for the better, to make Evolution possible, tenure of Life is an implied necessity.

Self-preservation, the survival of Self, is the second Instinct of Creation.

It exists only as a complement of the fundamental Instinct, the instinct to evolve, and will persist only until the fundamental instinct is satisfied in the full attainment of the Infinite End.

The full consciousness of God is the End of Being and its attainment the end of all urge to individual life.

With Individual Life Consciousness, come liberty, freedom, free choice. Yes, these we have, have had for a very long time, extremes of all kinds eluding us completely.

For the individual, to live, live more and more, 'have life

more abundant', implies perfect Activity; that is activity in perfect harmony with the Laws of Life as laid down by the Infinite Intelligence.

Activity not in harmony with the Laws of Life as laid down by the Infinite Intelligence, must lead to the non-attainment of the fullness of Life or the total loss of the consciousness of it in the individual: Death.

Activity not in harmony with the Laws of Life as laid down by the Infinite Intelligence is labelled: Sin. 'The wages of Sin is Death.'

Activity in perfect Harmony with the Laws of Life, presupposes perfect Knowledge of the Law, perfect Intention to apply it, perfect Power to put this intention into practice.

The individual, a manifestation, is finite. His knowledge, intention and power are limited.

Through lack of knowledge, he may err, in all probability will err, sin the sins of ignorance.

Ignorance of the Law in no way exonerates from its application.

The individual will, in all probability, die.

Through lack of right intent, innocent in ignorance of the Law, or guilty in knowledge of it; innocent in restriction of freedom or guilty in abuse of free choice, the individual may sin, in all probability, will sin, the sins of wrong intent.

The individual will, in all probability, die.

Through lack of power, inherent in him as a finite manifestation, or through former ignorant use of his portion of it, with wrong or right intent, guilty only in inverse ratio to his ignorance of the Law and in direct ratio to his deliberate abuses of free choice, the individual may fail, in all probability, will fail, the failures of the weak, sin the sins of incapacity.

The individual will, in all probability, die.

Ever? There is no Ever, no Space, no Time. They just accompany any and all creations, they come and go with them.

Death without reprieve means the end of Creation, its purpose unaccomplished; the thwarting of Infinite Intelligence, the shackling of Infinite Power, the immobilizing of Infinite Substance.

And by what? Just by this: intellectual myopia, enfeebled will, moribund impotence.

The Infinite by His Nature can neither be thwarted, nor shackled, nor immobilized; least of all by such phantoms.

Man by his nature, may, and, in all probability will, sin and die.

The purpose of the Infinite, that Man shall continue in the enjoyment of life until he reaches the conscious perception of the Infinite, cannot be thwarted by the liability of man to indulgence in activity not in harmony with the Laws of Life, sin, leading to death.

Any such contingency must be provided for, and is in fact provided for by the endowment of man by the Infinite with the power to survive himself in his kind, by reproduction.

To satisfy the irrepressible urge to live, to make the continuation of life possible, to make evolution possible, the reproduction of life is an implied necessity.

Procreation, the continuation of self by reproduction, Sex, is the third Instinct of Creation.

It exists only as a complement of the second Instinct, the instinct of self preservation, and will persist only until the second instinct is satisfied in the full attainment of the fullness of life.

The consciousness of the fullness of life is the End of Sex, and its attainment the end of all urge to procreate.

The need of the exercise of procreative faculties does not arise until the contingency it is intended to meet, the jeopardizing of individual life by indulgence in activity

not in harmony with the Laws of Life, sin, leading to death, has materialized. The absolute fullness of Life and the exercise of reproductive faculties are incompatible and they expand and contract in inverse ratio, as is shown by all grades of being, not only in distinct species and kingdoms, but also in different individuals of the same species.

The urge to the exercise of the procreative faculties only arises as a consequence of the perception, conscious or unconscious, by the subject of the inevitability of his death as a result of indulgence in activity not in harmony with the Laws of Life, sin, and is insistent in proportion to the gravity of the breaches of these Laws.

The short-lived are early and prolific procreators; conversely, early procreators are short-lived. Man, to whom his wider consciousness renders accessible a clearer grasp of the Laws of Life together with a closer observance of them is a relatively late procreator and long-liver; and in him the urgency of sex is in direct proportion to mortality and in inverse ratio to appreciation of the Laws of Life.

To man, survival to himself in his kind can only be a palliative for sin and death. It merely leads to the gradual awakening of one more consciousness, its development to a maturity far short of All-consciousness, and its senile decay to death.

To the Infinite, the survival of man to himself in his kind, can only be a temporary substitute for his intended immortality, a substitute to be discarded as soon as man, by dint of conscious striving, shall have attained to understanding of the Law of Life, by dint of conscious mastering of self, shall have secured in all his actions, conscious and unconscious, fullness of harmony with the Law of Life, sinlessness, and shall thereby have overcome the consequence of sin, Death.

In this conscious overcoming of Error, conscious and

unconscious, in the resulting attainment of the fullness of Life, in the natural and constant adherence to the Laws of Life once understood, in these alone shall man find the overcoming of sex and reach the Time when there shall no longer be any 'giving in marriage'.

With the fullness of life alone, of life that does not die, of life no longer needing reproduction, can come, must come, and will come the Consciousness of the Infinite, the goal set to man by God in the beginning, the end to which He leads with Infinite Irresistible Power.

To secure for man, at the appointed time, full understanding of the Law of Life, God must and does endow him with the urge to seek out that knowledge in every secret place, to seek it ceaselessly, remorselessly, relentlessly, until Light shall be found.

This urge is now at work in every single field of human thought, the seeker looking more and more, and deeper and deeper, within himself, to find the source of Light.

And looking within himself, this much light has the seeker seen: that God means him to live so that he should see Him, leads him along the path in His creative love, to see that that is good only which fosters life, in self and out of it, in man and beast and plant; to recognize as bad the smallest hurt to life, in act however vain, in thought even still-born; to seek for more light still into the Law of Life, to seek within himself, and seek and seek and seek, until the Dawn shall come and open God to man, until the Scheme of Things shall end as it must do.

And to these things so great, so old, so natural, greater than any thought, older than any hill, as natural as nature, modern science has given names, simple, clear, hard, emotionless; names that make it so easy for unbelievers to believe, that unbelievers now believe, though as yet unaware of it, just what their fathers did believe.

The names have changed, what matters that? Labels are new, perhaps more apt, they say perhaps more what they mean, and what they mean one may assume is perhaps more just what things are: details are fresh, conceptions clear, interpretations accurate and definitions most exact; but men have, after all, agreed, right through the whole of history, that all great things have always been, whatever they appeared to be; the disagreement only was about from where they should be seen, and from what angle one could get the perfect view of the object.

Reconciliation must now come, and priest and scientist will see, if they but exchange points of view, that all great things that ever were have always been just what they were, and what is more, have looked the same, from any single point of view at any one instant in Time.

Men have agreed to disagree, to take antipodean views, to look at things from the outside. The time must come when they shall see that all who differ must agree, if they sink personality, give up all petty prejudice, abandon pride and vanity, get into the other man's shoes, then, altogether, for a while, just look at things from the inside.

It is within that we shall find the Path to Consciousness and God; it is within that we shall gain the knowledge of the Law of Life, it is within that we shall curb power to hold the narrow path.

It is within that we must seek, and seek, and seek, and seek.

Chapter 2

TRINITY

It is within that we must seek.

Within? What is within? Where is within? What is the way to within? What is the key to it?

Does within begin where without ends? Does it end where without begins? Are they two totally different and separate things? Or are they but halves of one and the same thing, two arcs of one circumference the ends of which must always coincide in but one common point? Or, simpler still, are they perchance one and the very same thing of which we see in uneven proportions one aspect first and then another?

Let us seek.

Of without, we have a certain knowledge, a given consciousness. This objective consciousness we have acquired through observation, work and study, experience of the senses, the teachings of our masters, the work of our own minds.

Our understanding and appreciation of this objective consciousness, never for one instant remain stationary. Ceaselessly they grow and expand, but the process is gradual, the change is slow, so gradual, so slow that stagnation of mind may seem to us at times the portion of our life.

At others, however, in flashes, in blinding shafts of light, illumination flushes in, flooding our consciousness. We seem, in one instant divine, to leap to understanding of things as

yet undreamt of, to vault in but one second the dense barriers of ages, to pierce in one fierce burst the veils of generations, and then fall by the way, dazed by the revelation, stunned by the endless vista, numbed, shattered and broken, rejoicing though, beyond the force of words, that knowing not what we have known, we should still know beyond the pangs of doubt, that in one spark we had known all.

These are the two extremes, light gentle and soft, dim and low, reaching us imperceptibly, monotonously, unceasingly, as though the flickering flame of a tallow candle kept just alive enough to make us feel the more the all abounding darkness; and the blast of the Verb in clattering universes that makes all darkness go, only to make it seem the darker when It in turn has gone.

Between the two, all knowledge is englobed.

In the dull, monotonous humdrum of normal life, in the sickly swing of soul-dwarfing routine, which evanescent pleasures only seem to relieve in empty spasms, knowledge does come, however, though unheralded.

It creeps in steadily, stealthily, and though we are in fact hardly aware of its majestic tread or of our own enrichment of each day, we are blinder tenfold to the work of the means that make that wealth our own and make the hidden things emerge into the full daylight of consciousness.

Causes are active, night and day, without which the awkening of our understanding could not occur in centuries of life, and without which no single forward step would ever have been taken, and these are: attention, amplification, concentration, attention of senses and mind and soul, amplification of force in operation, concentration of thought, contemplative, analytical, creative.

And dull as it may seem, less dull as we awake spiritually, knowledge comes in, much in this way.

We are at work. The daily round is not very uplifting, and years of it have somehow smothered enthusiasm and hope. To make things worse, a wisdom tooth begins to ache, not much at first, but just enough to take our attention from our work. A sense of duty, a trace of struggling optimism, ordain that we shall just go on. We do. It is no good, attention is definitely passing from work to tooth.

The tooth gets worse, much worse, the pain grows and grows. There seems to be more power in it, its force is amplified. Everything has disappeared, the tooth alone is left. It bids us learn about it, learn quite a lot, more than we like to, and this compulsory acquisition of dental knowledge, made possible only by the amplification of the power involved in dental processes, prompts us to react.

We concentrate our thoughts on this preposterous toothache. We contemplate it, analyse it. It is an unbelievable revelation of what toothache can be. Something must be done about it; we think creatively, and go to the dentist.

The waiting-room is dull. We don't look around us. Why should we? There is absolutely nothing to look at. We are kept waiting a long time. Words fail us. We look at our watch; we are an hour before our time. An hour to wait. At any rate it is the right day. We look at our watch again: still exactly an hour to wait. Our watch has stopped, what a blessing. Perhaps there is only another minute to wait. Isn't there a clock in this benighted place? Yes, there it is, staring at us the whole time, and we hadn't even spotted it. And that too has stopped!

In fact it can't possibly have worked for centuries. It is the most astounding clock that was ever conceived. What an amazing piece of work. When was it made, where, by whom, for whom, and how on earth did it ever work? Wheels, springs, hammers, bells, ratchets, seconds, minutes, hours, days, weeks, years, the sun, the moon, the stars; it shows the whole of time in a microcosm of heavenly bodies. It truly deserves the closest and most careful inspection.

As we peer into its intensely complicated works, our sense of wonder grows apace. It is obviously very old indeed, 1713, Paris, Fleur de Lys suggests a royal owner,

who was it? Louis XIV. What care, what workmanship, what refinement of detail.

—Will you please come this way, Sir, the dentist is waiting.

How curious, the pain is less, distinctly. Perhaps we are over the worst, the tooth is getting better by itself. No, it is not. It is worse than ever. It was only the magic of the old clock which had taken the whole of our attention.

—Sir, I have a dreadful toothache. It will have to come out, it is one of the back ones. I say, what a clock you have in your waiting-room.

—Yes, isn't it? Very interesting history. Still, we will talk about that later.

An unendurable fifteen minutes, and then, rather sore, we emerge from the chair, the poorer by one tooth. What a relief!

—You won't have any more trouble. If you do, come and see me again. Now come along, and I will give you the history of my clock.

The thought of it, and soreness is forgotten.

—This clock was made to the order of Louis XIV. During the revolution it came over to England with some refugees, and eventually came into the possession of my great-great-grandfather and has remained in the family ever since. It must have been worked by weights. I never found out when these disappeared and have never known the clock to work. But if you look here, you will see a wheel which must have been worked by these weights, and if you disconnect the pendulum lever you can make this wheel go round much faster than the weights ever did, so that the sun will go round the dial several times in a minute and you will see the whole thing work.

We look at the clock, first this wheel, then that, then one lever, then another. The scheme of things is not very clear, the function of each part does not seem obvious.

Attention has given us all it can.

We disconnect the pendulum lever and make things work, slowly at first. We begin to understand a little better. A little more power and things become clearer still. It is all very wonderful. A little more still, and that is almost too

fast. Things that were clear seem to elude us, our understanding is getting blurred. Some things are too complex to be taken in at that rate; we must slow down.

Amplification of power has given us all it can.

Keeping the clock going, we borrow the dentist's magnifying glass and concentrate on one detail after another, checking the mind in all its wonderings. Our understanding, which until then had been rather vague and general, is transformed into a more precise appreciation of functions and relationships. We persevere. Fatigue supervenes, the mind wanders.

Concentration has given us all it can.

Attention, amplification and concentration have given us all they can, now. To-morrow, refreshed, better instructed, we can start again, our results will be better, we shall be capable of more for less expenditure, attention, amplification and concentration will give us the knowledge we need before we can consciously and intelligently effect one single change of value in our instrument of evolution, the body.

How strange the mouth feels without that tooth.

Before embarking on an investigation of the kind indicated above, it is wise to remember that its object, man, is a relatively late comer to a universe which was submitted from its inception to laws that were rigid before it was conceived, and will remain rigid long after it has dissolved, and that fundamental amongst these laws is this: the cause of causes, intelligence, energy and substance, God, is involved in every manifestation, to the inevitable end that creation shall evolve to the consciousness of the Infinite within.

To have survived thus far, man must have preserved a certain measure of harmony between himself and a law so unbending, and we may hope to detect in him an echo, however faint, of the infinity of intelligence, energy and substance involved in him.

Whilst we can appraise man only through the observation of what he does or does not (just as we appraised our clock only through what it did or should have done and failed to do), should we find that, in all things, he did all he should do, just as it should be done, in complete harmony with the

innermost laws of life, we could but conclude that having attained perfection in his activities, he had *ipso facto* established his claim to the fullness of life.

Should we find on the other hand that whilst not having as yet achieved perfection, he nevertheless strove all he could, to do all he should do, just as it should be done, seeking at every step increasing knowledge of and harmony with the innermost law, and daily achieving this in a measure however trifling, bearing in mind that cause ever has its effect, we could but conclude that he was establishing his title to ever increasing life, ever increasing health of soul and mind and body.

What is health?

Health is an effect: right-being following right-doing.

But right-doing is relative and we often look with disfavour upon an action which we had thought admirable at the time of its performance, and admirable because it then seemed to be the best of which we were capable.

This unwise depreciation is caused by our inclination to judge actions by their results rather than by their intention and cost, and it neglects the fact that the act which to-day costs us all we have to give, is good inasmuch as it is a full measure of our capacity.

It also overlooks the more important fact that in the striving and the effort of to-day, we have so added to our strength that acts as yet undreamt of may not to-morrow cost us all, and may dwarf out of all proportion that which is so good to-day, just because it does cost so much.

There is no stagnation with right-doing; the same action can never twice be equally right, and to remain uniformly right it should be implemented so as always to involve the whole of our advancing capacity.

There is no stagnation with the effect of right-doing, right-being; as right action ascends to greater heights, so does right-being forge ahead, and, bitter truth, as all things material must ever rise or fall, the feeble action of to-day breeds the feeble being of to-morrow.

It is not enough in judging action to consider alone its aim and cost; it is essential that we should pay attention to the consciousness of aim and cost, for in this conscious-

ness rests the power of right-action to produce right-being. There is no true beauty in an act with beauty unseen in its aim, there is no greatness in an effort when the cost is unknown, there is no power in the soul that does not know it is itself.

There is no stagnation in consciousness; each day we know ourselves a little more for what we are or get involved a little deeper in empty dreams which are not us, and never for two moments on end do we see ourselves as we are, with vision uniformly clear.

As aim, effort and consciousness produce, as they rise or fall, an action more or less correct, so right-action, according to its rise or fall, inevitably affects right-being, or in other words, health.

We may conclude: health is the effect of the ever more conscious enjoyment of all our faculties and exercise of all our functions, in ever more perfect harmony with the laws of life, ever better understood and more faithfully applied. It is a constantly evolving factor in the development of the instrument of consciousness of the infinite life, man, and unless man has more life to-day than he had yesterday, he is not in health, however healthy he may think himself.

Regarding life itself we can say nothing in positive terms. All we know is: 'Here life is apparent to us, here it is not.' The most careful observation of its processes only equips us with negative knowledge, but though negative, this at least enables us to state that certain facts are common to all life's manifestations, and that in the absence of any of them it does not manifest, to us.

Every one of life's manifestations involves material activity subject to law, but we must note that the converse is not true, to us: all material activities subject to law do not appear to us as manifestations of life, whether they be or not.

Material activity subject to law; things, work, order; matter, energy, thought; the echo to the infinite substance, energy and intelligence involved in us.

The possibilities latent in this echo, faint though it may be, will appear if we investigate the factors governing the nature, clearness, volume and direction of an echo.

The first of these factors is the entity controlling the instrument emitting the original sound to be echoed. A howitzer can only generate a soulless smashing echo. The human voice, though poorer in volume, can pour out an infinite diversity of messages with endless variations of modulation, range and power. A foul mind will generate a foul echo, a learned mind an echo stirring thought, a great mind an echo full of inspiration, an infinite mind, presumably, an infinite echo; or at least, they may do so, other conditions being favourable.

The second factor is the distance that separates the source of sound from its reflector, coupled with the sound-carrying properties of its medium, the air. The greater the distance, the weaker the sound and the greater the time occupied in its displacement, but great as this distance and time may be, they in no way affect the nature of the sound emitted nor that of the message it conveys.

The third factor is the character of the reflector. One reflector absorbs more and reflects less sound than another, or it may reflect sound more distinctly and prove therefore a truer vehicle for the message sound conveys. Convex or concave, it may disperse or concentrate sound and decrease or increase the volume of it at a given point, without in any way affecting the nature of its message.

The fourth factor is the angle which the reflector makes with the line of travel of the original sound, this affecting only the direction of the echo and leaving both sound and message untouched.

Given that the reflector be concave and a true segment of a sphere at an angle of 90 degrees with the line of travel of the original sound, given that the source of sound be the centre of that sphere, the sound will be reflected in the direction of its source, its volume increasing as the source is approached, but the message conveyed will remain unchanged.

The greater the segment the more sound it will receive from and reflect to the source of sound, and this holds good with every increase in size of the reflector until the reflector becomes the whole hollow sphere.

Given that this hollow sphere be a perfect sound reflector,

given that one note be sounded for one instant at the beginning of time, that one note will be reflected to its source, pass beyond it to all antipodes, only to be reflected back again to its source indefinitely, undiminished, its message retaining its full clearness and force for the whole of time.

Given further that this one note be sounded at the beginning of time, and held until its first reflection had returned to its source, and then never sounded again, that note would continue passing through its source uninterruptedly for the whole of time.

Yet, throughout the whole of time, within this hollow sphere, all would remain absolute silence, unless either the source of sound or its reflector could hear as well as speak, for a capacity to hear and appreciate is essential before an echo, be it faint or shattering, be it mere sound or words of wisdom, be it evil or divine, can reach its full fruition.

Be the mind that speaks ever so great, be the voice ever so loud, be the distance ever so small, be the time ever so short, be the reflector ever so perfect, be the echo ever so concentrated, all this avails nothing if the receiver does not hear.

It still avails nothing when the receiver can hear and will not, hears but listens not, listens but cannot answer, can answer but will not, can answer yes but answers no. We may alter every single one of the factors as much as we like, problems will change, but law will not be affected.

If the echo of the infinity of thought and energy and substance involved in him seems to man but a faint reflection of the initial word, this is due neither to weakness in the initial thought nor to feebleness in the initial tone. It is due to us and us alone, in that we are inefficient reflectors who do not concentrate or do so where we never should, who can, though seldom care to hear, who can, though seldom answer, who answer no when yes would open all.

Let us listen within ourselves, let us hear all there is to hear, let us so amplify and magnify the power of life within us that we shall become conscious of the faintest ripples on its surface, let us so concentrate on the perfect working of

every cog and wheel of our innermost selves that we may in the end achieve perfect harmony with the law of life. First and foremost, before we endeavour to strike perfect harmonies, let us eliminate the most flagrant discords, let us uproot gross daily breaches of the law of life.

A simple parable, properly understood, may help to make those breaches detach themselves from the background of life, and although some of the details of the tale that follows may appear at first to be irrelevant, the reader will perceive, as he progresses through the book, that they all illustrate some breach of law which must be overcome before development can follow its course without hindrance.

Chapter 3

THE LIFE CIRCUS

John, ten years of age, was being taken to a Christmas Circus, by his maternal aunt, a cheerful, jolly spinster with an infectious grin, who always saw the bright side of things and managed at the age of fifty to look about thirty and sound much younger. She had never had anybody of her own to love, and having much love to give she simply let it all fall on John, although he was hardly the kind of youngster she would have fashioned had she been entrusted by God with the shaping of her only nephew.

John wore spectacles—always seemed to have done so—and managed from the very beginning, to create with their help, an impression of precocious learning and blasé priggishness, which the maturity of his years had only served to emphasize. His father, the professor, also wore glasses, and had always done so, with identical effect.

So John and the aunt went to the Circus, John ready to dissect, the aunt ready to laugh. There was scope for both.

During an interval, a kindly clown endeavoured to help the attendants to remove some mats that were not needed for the next turn. His method, though simple, was ineffective. His root principle appeared to be first to stand on the mat he wished to remove, and then to pull it up, unexpectedly losing his balance in the process. He repeated this performance a number of times, never by any chance learning anything by his experience, nor shedding any of his astonishment at the inexplicable reluctance of the mat to allow itself to be taken out when all the other mats had gone out most amiably.

The aunt laughed till she ached, and then went on laughing until tears rolled down her cheeks. John was patient and waited till she had calmed herself before he

spoke: 'But Aunt Jane! how could you expect him to lift that mat whilst he was standing on it? Don't you see, it is an impossibility, he is spending half his energy keeping the mat down with his feet and the other half trying to lift it with his hands! He must fall.' And the Aunt first thought she would laugh again, and then she didn't, and then she just smiled.

. . . 'Obviously (thought she) there is a lot to be said for both points of view, perhaps both are right, perhaps both are wrong. Who knows? Let us forget.'

She was trying to forget something, she did not quite know what. Perhaps it was the funny turn that John thought stupid, or perhaps it was that the John she loved was not exactly the John behind the spectacles. Still he would have to do, he was the only John she had to love and she couldn't do without some John to love. Yes, that was it. So she tried to forget a little harder and she had almost got herself to believe she had forgotten altogether, that in fact it wasn't that at all (of course it wasn't), when the next turn began, and she suddenly found herself hoping frightfully hard that it wouldn't be a funny turn; she almost begged God to make it a sad turn, because she knew she might have to cry if the turn were gay, because John, her John, the John that wasn't her John, couldn't laugh and live.

Well, it was a funny turn, a very funny, an excruciatingly funny turn, much more so than the last one, at any rate the end of it, and yet the aunt did not cry, at least at first, and then she thought she would sob. The attendants brought in a lot of dumb-bells, every one of them bigger and heavier than the last one, until they came in with a giant of a thing. Then an enormous man made a very solemn entry; he really was big, tremendously big; he looked fiercely at everybody, and then more fiercely at all the dumb-bells, and then he showed them exactly what he thought of them, and that was extremely little. They can never before have had such a time in their lives, it was enough to take all the conceit out of them and make them pull in their fat tummies with shame. But the big man seemed to leave the biggest dumb-bell of all for the end. He looked at it, and then a smile full of pity seemed to come

over his face, he beckoned to the clown and turning to the heavy dumb-bell, this is what he said to it, or at least you could have sworn it was: 'All right, poor fat old one, don't fret; you and I have been pals for years and I wouldn't for the world disgrace you in public. I will just let Mr. Clown find out what a wonder you are.'

Mr. Clown got ready to tackle the big fellow. He was full of respect, approached it on tip-toe, squared his shoulders, bent down two or three times, got hold of it, and then an amazing thing happened: the dumb-bell, the giant one, flew into the air over the clown's head, he fell backwards with it, turned several somersaults, all over the other dumb-bells, broke at least several legs, four or five arms and all his skulls a good many times, and then lay on his back, counting stars with his fingers very fast, panting frightfully hard, with the big dumb-bell resting on his tummy. And the big dumb-bell was going up and down like a feather with each breath, and the cruel strong man was laughing like a devil. But the clown had really seemed to have hurt himself in such a friendly way that all the children laughed and most of the grown-ups too. The big dumb-bell was hollow!

The aunt didn't laugh, something seemed to stop her. Then she looked at John. He was smiling, not a great smile, perhaps it was not very full-blooded, but still, it was a smile. She dreamt she had seen the dawn of humour, and then she beamed, and then John spoke, spoke very reasonably: 'Of course, it was bound to happen. If he thought the dumb-bell was real and heavy, he was bound to spend much more energy than he wanted, and then he must overbalance. But wasn't it funny the way the big man caught him?' And John smiled again, his nasty little smile. 'You little beast,' thought the aunt. 'You beastly little beast. That is why you smiled, was it? You can't laugh, you can't live. You can't be generous, you can't anything. Oh! God, for my John, my real John!' And she didn't want any more turns. She wanted the whole Circus to be dead. Yes, spectators and all.

But then the Circus people couldn't know that. They had lots more turns and they simply gave them. And they got

busy, a great many of them, arranging things overhead, trapezes, and rings, and bars, and nets for the acrobats to fall into when they made mistakes and spent 'much more energy than they wanted'. And all this was bound to take time, and to fill up the time men brought in a grand piano, and a fine music stool, and the clown was going to play; anybody could see it by the way he was getting excited. And when the men had got everything ready, the clown sat on the stool and just looked inspired. You could see he was going to play beautifully, in spite of his costume, and all his paint and colour. And then when he had finished getting inspired, his hands came down to play it all, but the piano was too far from the stool, so he couldn't reach it. When he understood that, when he saw that it really had happened because the piano was too far, he called all the men back and got them to move the piano to where it ought to have been from the start. And then he started again, and his hands came down with a terrific bang, and you could see he had hurt his finger tips very badly, because he was sucking them all, altogether. And still sucking them, he grunted the men back again and called them names for putting the piano too near, and then they got it about right, but you could see that that hitting his finger tips on top of the piano had been very bad for his inspiration, because every time he got his hands near the piano they stopped dead, because his inspiration all seemed to run right out of him, through the top of his head, back to where it had come from. And besides, it didn't matter any longer because the trapezes and nets and things were ready, and they wouldn't give him any more time and so he sat on the edge of the circus and cried all through the next turn. And although he cried and sobbed and wept, and made a terrible noise, everybody else laughed and laughed and laughed and made a much more terrible noise, except John, because the clown was such an ass not to move the piano stool himself, and the aunt because John . . . well, just because.

And when the show was finished the aunt grabbed John by the hand and dragged him very fast, through the crowd, to the door, and she insisted on going home on top of a bus although it was so dark and so cold, and John had warned

her about the danger of catching a cold, but she wouldn't listen. 'Anyhow, why should she go inside the bus, in the light, and let everybody see she was crying, and after a circus, too!' And as they passed a lamp-post John saw the tears running down her face, and he was very glad to be able to point out to her how right he had been, and how one could only expect one's eyes to water in that wind.

And then she bit her lip till it bled. And she began to feel the cold very much, she shivered, then she seemed to feel it very much less, then it seemed to go altogether, everything seemed to go. The aunt was in heaven, attending a circus, with John; 'Yes, thank you, God, the real John, thank you, God.'

* * * * *

This book, and then, this tale. How incongruous! It is too long, too much the same. The fun is all about clowns making mistakes, and never seeing it, mistakes that others seem to see quite easily and don't, sorrows that seem to matter tremendously to some whilst others appear to take them ever so light-heartedly. It all has to do with people who think they understand and who yet don't, and people who don't seem to, although perhaps they may. It is all about unimportant things that seem to matter a lot and things of the utmost importance about which no one seems to care, and nobody really seems to know which is which.

Life, too, perhaps, may seem incongruous, too long, too much the same, too full of clowns making mistakes they never see, mistakes that others think they understand although they seldom really do, too full of sorrows that others just pass by, too full of laughter that jars and grates when our own hearts are broken, too full of unimportant things that seem to matter such a lot, that they leave us no thought at all for things that really do, and do not even leave us time to sweep away the dust that over-lies the secret places of our souls.

And this is how this picture should be read:

If in the microcosm, if in ourselves, the echo of the infinity of thought and energy and substance involved in us, be but a faint reflection of the initial word, this is due

to our thoughtless use of the infinity of thought involved in us, to our wasteful use of the infinity of energy involved in us, to our self-destructive use of the infinity of substance involved in us.

Thoughtlessness so thought-destroying, restlessness so force-consuming, squandering so substance-eating, that we are ever left with a deep sense of deficiency of all three, sometimes too tired to think, too tired to act, sometimes even too tired to eat, and the bitter consciousness that for all this exhaustion of soul and nerve and body, we have not even purchased one single thing worth holding, beyond experience, and that even to experience we cannot give full value for lack of thought, of force and of substance.

And if through this we should so constantly fall short of our preordained destiny, the ultimate consciousness of the Cause of Causes within us, if through this, the echo of the infinity of thought and energy and substance involved in us should be so faint as to be but seldom perceived, if through this our consciousness should decay into one of helpless negation and acute pauperism of thought and energy and substance, if through this we should sense Life and our own effete share of it as nothing but a sullen load, and daily curse under our breath the very knowledge of its weight, there should in this be not one thing to justify the least surprise or anger.

It would but be just, that cause should have its effect.

Let us remember that our state of consciousness at any moment is but an effect, of many causes, unfathomable causes, maybe, but an effect nevertheless.

That whilst we may believe that amongst these causes should be included, with due respect, either our stars, or our inheritance, or our environment, or perhaps all three in equal or unequal shares, true wisdom will lead us away from this engrossment in the contemplation of our puny selves as the essential centres of all cosmic phenomena, and bid us acquaint ourselves with the forces by which all living entities are swayed independently of all individuality.

That these forces have come to be known by the name of instinct, simply because they are so obviously instinct in all living things, and that they are fundamentally three,

the instinct to evolve, upwards; the instinct to live, the fuller life; the instinct to procreate, the better being.

That the second and third are merely subsidiaries of the first, and that this in its turn subsists only as a means to an end. That all three have, emerging from them, for their more complete satisfaction, and for that only, countless further subsidiaries, each one intended to promote the perfect laying of one brick in the house of the Infinite, and one only.

That in sum, their very existence finds its one and only justification in the fact that they are necessary agents in the ultimate fulfilment of the scheme of things, and that the realization of any single part of the ultimate scheme immediately and automatically deprives the instinct that has made it possible, of any reason for existence.

If in our handling of this chain of causal principles, the three fundamental instincts, we should ask ourselves what is the justification of the third, the instinct to reproduce, sex, we could find but one answer: our utter failure to satisfy the second, the instinct to go on living; the fact that we simply do not appear to know how to go on living.

And we should in the same instant realize that if we ever should learn how to live, and then made full use of the gift and lived life to the very brim of an ever full cup, we should destroy for evermore the only justification of the third, the instinct to reproduce, sex. Sex would never again be a problem; it would cease to exist. There would no longer be any 'giving in marriage', although marriage there would still be, the marriage that is 'made in heaven'. Male and female would still need each other, be drawn to each other, love each other, complete each other, but would neither desire nor perform the act of reproduction. There should be 'no more death' and man should live on, as he was meant to do, from the very first day.

Any teaching that seeks the ultimate motive of all human activity in the instinct to reproduce is false in its very root. It rests solely on the unwarranted elevation of a subsidiary instinct to the level of a root instinct, and overlooks the cardinal fact that this subsidiary instinct is born only as a result of our failure to satisfy the one immediately higher

in precedence, the instinct to live on, and that it must die as soon as the instinct to live on is fully satisfied.

Far from basing our psychology on the acceptance of the instinct to reproduce as an eternal necessity, we should endeavour to root it in the conception that from the very first day the instinct to reproduce was destined to eventual annihilation, and that the all-important problem that faces man at the present stage of his evolution is this: How am I to satisfy to the full the instinct to live on?

Man must evolve a technique of life which will constantly increase the volume of the echo to the infinity of thought and energy and substance involved in him, expand his means of consciousness of that echo and so widen his field of appreciation that it shall eventually include the conscious perception of the Cause of Causes.

The test of the perfect technique of life is therefore: does it make us increasingly conscious of the infinite inexhaustible life in us?

Judged by this standard, the normal technique of life fails.

To the majority the consciousness of the Infinite within them hardly ever enters the experience of a whole life, and very much more rarely still does it suffuse that whole life. A pallid substitute is by the greater number taken to do duty for this deep-seated consciousness of the God within us. To make up for this ever-present consciousness of the immanent Infinity, it seems that an hour, once a week, spent in some appointed temple, is all that is required by the human soul for it to realize the vastness of its ultimate possibilities. Form is made to do office for reality, and so great is the respect in which it is held, that for countless generations, the blood of man has been lavishly shed to settle finally its intricate details.

If our technique be found so patently and painfully inadequate, it were but reasonable ere we attempt to erect in its stead a sounder structure, to make ourselves acquainted with the true character of its errors, and ruthlessly to destroy them. Before we face the problem: 'How am I to satisfy to the full the instinct to live on?' a problem which can only be solved by a positive technique of purposive

action, we must face and solve the negative problem: 'How am I to eliminate from my activities all that which makes it impossible for me ever to enjoy an ever increasing sense of being alive?'

Nothing that I do, however trifling, which fritters away my 'life' and thereby reduces my sense of being alive, can ever be unimportant enough not to call aloud for instant elimination. Nothing that I do, however trifling, that ever to the least extent muffles the echo to the infinity of thought and energy and substance involved in me, must ever be allowed to survive my perception of it. I must at once attempt so to ordain all my activities that it shall gradually, day by day, tend to ultimate destruction.

To achieve this object, we must first of all satisfy ourselves as to the nature of these activities.

We must then ascertain the form these activities should take, assuming that we had achieved in them perfect harmony with the laws of life.

We must then evolve a method which will enable us to secure absolutely reliable information as to the form these activities take at the present moment in their imperfect development.

We must then compare the ideal with the actual, and evolve a method which will enable us to secure absolutely reliable information as to the causes of departures from the ideal.

We must then devise ways and means for the elimination of these causes or their overcoming.

We must then apply those means so consistently, that we shall in time substitute habits in perfect harmony with the laws of life, for the inharmonious habits we now indulge in, mostly unconsciously. It will then have become just as unnatural for man to live in discord with the laws of life, as it is for the perfect gentleman, according to our present national standards, to eat peas with a knife! The perfect man could then no more live the imperfect life, therefore, could no more dream of dying, than the perfect gentleman could dream of breaking by far the most important canon of his code.

In man, we have detected an echo of the Infinity of

thought and energy and substance. That is, he appears to function on three planes, his activities may involve either thought, or energy, or substance.

In fact, every one of his activities, implies coincident function on all three planes, and therefore opens up a liability to error, loss of harmony with the laws of life, in each of these three planes, each error resulting in a reduction of the consciousness of life proportional to its gravity.

Thought, energy, substance. Man, as he appears to us, functions in all his activities on the planes of intelligence, nervous energy and substance. He may fail, consciously or unconsciously, mentally, dynamically, mechanically.

But if he raises his efficiency on all three planes, in harmony with the laws of life, he may ultimately evolve into a being whose plane of function may become so much higher than the one on which he now gravitates, that he may conceivably enter the realms of spiritual consciousness.

As he now appears to us, all his processes involve, more or less consciously, thought, energy, substance.

If he move his arm, a certain amount of thought is involved, whether conscious or unconscious; a certain amount of energy is expended and a certain amount of substance displaced.

If the activities concerned be the unconscious functions of his organs, such as those of the heart, the lungs, or the digestive apparatus, the same law still holds good. It is obvious that in all these, substance is mechanically affected; energy is being expended to produce work. That thought is intimately involved, though maybe unconsciously, is less obvious. The heart of the individual whose normal pulse is 80 will only maintain that mean as long as he maintains his mean of thought. Any exciting or stimulating thought will excite and stimulate the heart, raising the pulse in proportion to its departure from mean thought, both in character and in intensity. The lungs of the individual whose normal breathing rate is 17 will only maintain that mean as long as he maintains his mean of thought, changes of thought producing proportional changes in breathing.

Proportionately, the functions of the digestive apparatus will reflect all departures from the mean of thought.

This holds true for both stimulation and depression, acceleration and deceleration. There is hardly a function of the whole organism on which the actual influence of thought has not been detected in himself by the average individual, although he may have failed to draw the requisite conclusions and apply the implied moral—both to his cost. Mental disturbances do to common knowledge produce results as varied as the following: palpitations of the heart, stoppage of the heart, even fatally, and other disorderly action of the heart, shortness of breath, quick, slow, regular or irregular breathing, changes in salivary, gastric and other secretions, even to their temporary interruption, cold sweat, hot sweat, indigestion, diarrhoea, constipation, goose flesh, the hair standing on end, faintness, the loss of one or more senses. A lengthy list.

In man, sound and suitable mental activity must be present wherever sound physical activity is expected.

The law holds good, where mindless mechanism is concerned.

A motor car will only cease to function for one of three reasons, one—a physical reason, the car is damaged or has run into a physical obstacle; two—an energy reason, it has run out of power, petrol, electricity; three—a thought reason, the driver has stopped it. In each one of the three, the other two are inseparably involved. In the damage to the car, energy is involved, in the shape of both momentum and inertia, and they in turn have involved in them the law of gravity, and he who says: law, posits behind that law: intelligence. In the petrol or the electricity, their substance is involved and they themselves are the offspring of law. In stopping the car the driver involves his own being in activity of thought and energy and substance. The three always appear so inseparable, that we may conclude, that the three are in fact but the One Intelligence. Man has already travelled far on the way to that conclusion, and whenever he has been delayed on his journey up the chain of causes, he has remained true to what appears to be a necessity of his very being. It seems as though being in-

wardly aware of his ultimate destiny the consciousness of the absolute, he cannot help seeking, beyond the last cause just understood, ever this one thing: an intelligence.

As man has never in the known course of his evolution been able to grasp the conception of an intelligence without a person, he has, throughout the whole of history, been driven by this disability to assume as the next—as yet not understood—cause, a person possessed of superhuman intelligence. As he knew the human intelligence to be incapable of fulfilling the position of that as yet not-understood cause, he logically postulated a personal god intelligent and powerful enough to fulfil the function of that cause.

This process of the mind stands out clearly if we trace man's progress in his attempt to follow the chain of cause and effect. Greek mythology provides us with a number of instances of this process. The Greek mind, enquiring, observes phenomena, seeks for their causes, and discovers without undue difficulty perhaps a few of their immediate causes. In none of these is personal intelligence greatly in evidence, but in spite of that fact, when the Greek mind fails to detect the next cause, it must needs assume it to be an intelligent person, and lo! and behold! we have the god of fire, the god of wind, the god of the ocean, the god of volcanic forces and countless others, and behind them all, the god of them all, Zeus, poor mean-spirited Zeus, so poor only because man's own thought was so poor, and man had always made his gods in his own image, and always does, and always will.

Shortly after Hellenic thought had explained its phenomena to its own satisfaction; a satisfaction that soon begat the germs of dissatisfaction with itself, the Semitic mind leapt one big leap, and swept away, mercilessly, countless little gods, countless pathetic little causes that were no causes at all, and understood one big thing. It grasped at last, this one cardinal fact, that all phenomena need for their causes three principles and three only. All-Creative Thought, All-Motive Energy, and All-Underlying Substance. And it proceeded to see within this trinity eternal one intelligence, and as ever, remaining faithful to its age-long instinct, one intelligence in three persons, God the

Father, All-Creative Thought; God the Holy Ghost, All-Motive Energy; God the Son, All-Sustaining Substance.

When the human mind has once and for all understood that the Infinity of thought and energy and substance involved in it is one indivisible whole, it will remain faithful to its age-long instinct and will proceed to see within this eternal trinity and all its manifestations, including itself, one intelligence, and feel and be, at one with God.

Such is the journey the western mind has travelled; such is the path the eastern mind had trodden long before it, and trodden more than once, though West is West and East is East, and West will only look at East through western eyes.

Thought, energy and substance. Man, in all his activities, functions coincidentally on the planes of intelligence, nervous energy and substance, but he does so in two main modes of consciousness, generally referred to as the 'Conscious Mind' and the 'Unconscious', it being noted that some schools divide the unconscious into the Superconscious and the Sub-conscious Mind. The line of demarcation between these is ill-defined and varies extensively with individuals and conditions.

These terms, applied to states so little understood, can at best be but the vaguest of indications as to the location of frontiers the chief characteristic of which is their extreme flexibility. They should be accepted and used in the clear understanding that they are an attempt to set bounds, the very investigation of which immediately displaces them, and that the deeper the investigation, the more marked their displacement.

Alternative terms for the activities of the Conscious and those of the Un-conscious Mind, such as Objective and Subjective activity, suffer similarly from lack of clearness in our conceptions. It is only through a sustained individual effort to clarify our conceptions that we shall arrive at some clear understanding of what we mean when we use certain words. Meanwhile we shall have to go on using them, confessing that we hardly know what we mean by them, and that we simply wish to indicate that our minds are seeking for knowledge in certain directions, and that words are mere

signposts that tell the world of the land we hope to reach.

Fully realizing that some of our words awaken in different individuals different shades of understanding, and that, having no better, we fight with weapons the inadequacy of which is only too patent to us, we may state that the conscious activities of normal man are those he indulges in consciously whilst in the enjoyment of his workaday wide-awake consciousness, the objective activities of his conscious hours; and that his unconscious activities are those of which he is the seat without being consciously cognisant of the fact; that is, the whole of the remainder of his activities, on whatever plane, whether unconsciously indulged in whilst he is conscious and wide awake, or whilst he is unconscious or asleep.

The more we ponder over the essential instability of the line of demarcation between the conscious and the unconscious mind, the more we realize that, large as the realms of the conscious may appear at times, those of the unconscious are potentially of infinitely large proportions, and that our present state of consciousness makes it altogether impossible for us to set any bounds, however vague, to territories so superficially explored.

Should we manage to penetrate a little further into the lands of the unknown and thereby proportionately increase the area of the known, and expand the field of conscious function, we should feel no surprise, if with each forward step we found ourselves more profoundly convinced that full knowledge of the unconscious realms would in the end be found synonymous with full knowledge of the Cause of Causes.

If, assuming that we had so deeply penetrated into the unexplored that the Cause of Causes were itself brought within the compass of our consciousness, we should turn back and travel down the causal chain from the first cause to the first effect, watching the first effect evolving into cause and then producing its effect, we should ultimately discover, as the ultimate effect, the activities of the conscious mind.

Observing, then, the activities of man's conscious mind on the planes of thought and energy and substance, we

should be filled with sorrow and regret at the discovery that all these countless æons had led to such a hopeless confusion of thoughtlessness so thought-destroying, restlessness so force-consuming, squandering so substance-eating, that every single one of man's activities implied some breach, however trifling, of the fundamental laws of life.

We should conclude that this world of ours was indeed full of clowns, clowns standing on mats they wish to raise, and fighting good with half their selves, and evil with the other half, clowns burning their last ounce of strength to raise aloft a featherweight, and struggling hard to make of life the killing work of a few years, when it was meant to be the gladness of eternity; clowns sweating blood to move about their grand pianos, when just a touch would move a stool, and crushing life out of their souls to bring the Infinite to them, when just a touch would bring them to the Infinite.

And that around these painted clowns were other clowns, clowns rich, clowns poor, clowns young and old, clowns sick, clowns sad, clowns gay, clowns mad, clowns without number.

Clowns, all of them, with just one thing in common, the knowledge that every single one of the other clowns really was a clown, and what is more, that the very thing that made him the special kind of clown he was, was to themselves at any rate, as clear as the light of day. So clear in fact that they would find it quite easy to show every other clown how he should behave in order to cease being a clown.

Oblivious, all of them however, to some important facts: the fact that what does make a clown is after all debatable; that though debatable it must involve a breach of law, or what from our standpoint appears to be the law; that ignorance of law does not exonerate its breaker, neither does it conduce to its faithful observance; that being told how one is breaking the law, does not in every case enable one to live in its obedience, neither does it create the tendency to keep every single act and thought within its bounds. The fundamental fact is that man in all his acts,

be they lawful or unlawful, is ruled irretrievably by what he is, within; that when he sins a surface sin, the cause is in a deeper sin, within; and that no single one of the outside manifestations of his inner activities has ever been or can ever be affected by anything but change within.

The fact is that conscious human activity is based on unconscious human activity and ultimately governed and shaped by it; that no improvement in conscious activity can be procured by anything but a preliminary improvement in unconscious activity; that before man can achieve this improvement in unconscious activity, he must become conscious of it, and that he can only improve it in true proportion to his increased consciousness of it.

Evolution demands that man shall constantly widen his field of consciousness within; that evolution must become Conscious Evolution through his increasing his consciousness of his unconsciousness within.

Chapter 4

THE FIRST TWO CAUSES OF CONTRACTION

Man should not rest satisfied with blind progression, less still with stagnation. He must progress intelligently; evolve consciously.

He must expand the bounds of his consciousness, become conscious of that which is now unconscious, master it, use it to ever improving purpose.

He needs I. Knowledge of the unconscious;
II. Intention to apply that knowledge;
III. Power to put this intention into practice.

To acquire knowledge of the unconscious and its laws, he requires: attention, amplification, concentration. Attention to that which is unconscious, attention of senses, mind and soul; amplification of the power involved in processes at present unconscious; concentration of thought on unconscious processes and manifestations of law, thought contemplative, analytical, creative.

He must as a preliminary withdraw his attention from the promotion and observation of the present activities of his conscious mind: the activities of which his mind is, at present, conscious.

Although this statement may appear contradictory, since it implies that an increase of consciousness is to be sought in a decrease of it, it is true, for two reasons. The first, that the mind of man in sound conscious activity is essentially focal, one-pointed, only reaches its highest efficiency in concentration on one object to the exclusion of all others, its efficiency being in proportion to the completeness of this concentration and exclusion. The second reason is that all activity involves a given expenditure of energy, that the whole of the energy at the disposal of man is essentially one, one fund in one store, and that the

expenditure of any portion of that energy on any process outside that which he most particularly wishes to promote and observe, proportionately reduces the amount of energy available for this particular process, renders it more difficult of observation, and tends to divert attention to the outside and irrelevant process on which it is expended.

The preliminary withdrawal of this attention from the promotion and observation of the processes of his conscious mind, means his withdrawal from that which is at normal times the field of function of his conscious mind, but it in no way implies any reduction of activity on the part of his conscious mind, nor any shrinking of its consciousness of being.

But before he can exclusively attend to the promotion and observation of processes, at present unconscious, attain the highest consciousness of them, amplify the tone and volume of their performance so as to make them, and the laws that govern them, abundantly clear to himself, man must reduce to the smallest possible limits all expenditure of energy on any processes outside those he wishes to promote and observe, whether that expenditure of energy be conscious or unconscious, in order to increase as much as possible the amount of energy available for the performance of those of which he wishes to become conscious. The reason is that the mere withdrawal of his attention from the promotion and observation of the present processes of his conscious mind, is not by itself sufficient to inhibit these processes, or to prevent expenditure of energy on their continuation. It permits of their continuation, both as consumers of energy, and potential disturbers of attention.

The mere withdrawal of attention from the promotion and observation of all the present processes of his conscious mind not being sufficient, man is compelled to go beyond this negative action. He must take positive steps completely to inhibit all unconscious expenditure of energy on all processes that may unconsciously persist, even after he has taken the negative precaution of withdrawing his attention from their promotion and observation.

If man wishes to become conscious of, and to understand, his unconscious processes, which is essential before he can

secure in them perfect harmony with the laws of life, he must so concentrate on them to the complete exclusion of all normally conscious processes, that the utmost of his energy being devoted to their performance, they will be proportionately amplified and made more distinct; the factors contributing to, or detracting from, their harmonious development, will be made apparent and brought under control.

The conscious mind is, generally speaking, concerned only in the promotion of objective work, on the development of which energy is expended for the purpose of initiating, maintaining, altering, arresting, registering or memorizing, certain relationships between the subject and the objective world, whether these activities be of a motor or sensory, a giving or receiving, category.

Only on rare occasions does it concern itself superficially with the promotion or improvement of the most obvious of his subjective activities.

And yet, man's subjective activities are of infinitely greater importance to his efficiency and evolution, than his objective activities, and the need for their development in perfect harmony with the laws of life is more essential than that of his objective activities, although this aspect of the problem of his evolution seldom seems to occur to the average man.

Man's objective activities resolve themselves into—

I. The registration of any objective impression, for which registration he makes use of his sensory system; and

II. His action on and reaction to the objective world, for which action and reaction he makes use of his mind, motor nervous system and muscles: thought, energy, substance.

The combination of these two forms of activity can be summed up as the use to which he puts his instrument, the body.

Man's subjective activities, at any rate those which are closest to the surface and likely to emerge first into consciousness as soon as he looks within, resolve themselves into activities on the development of which he expends energy for the purpose of initiating, maintaining, altering, arresting and registering evolutionary processes within him-

self, whether these processes be of an afferent or efferent nature, and for which he unconsciously makes use of his mind, nervous, organic and muscular systems: thought, energy, substance. The combination of these can be summed up as the evolution of his organism itself.

Man's objective activities: the use to which he puts his instrument, the body.

Man's subjective activities: the evolution of that instrument.

As the nature, tone, tunefulness and volume of sound of a piano govern and limit the eventual performance of the most highly evolved pianist, so do the nature, qualities, and power of the instrument that man unconsciously evolves for himself, absolutely govern and limit the eventual performance of the most highly evolved ego.

Such an ego is incapable of manifesting thought on the highest plane on which it is itself capable of functioning, through the instrumentality of a brain, the unconscious evolution of which is inadequate; it is incapable of using energy on the highest plane of dynamic efficiency, on which it is itself potentially capable of functioning, through the instrumentality of a nervous system, the unconscious evolution of which is inadequate; it is incapable of moving substance on the highest plane of mechanical efficiency, on which it is itself potentially capable of functioning, through the instrumentality of a muscular system, the unconscious evolution of which is inadequate.

Inhibition of objective activity, concentration on subjective activity, amount to one hundred per cent efficient sleep.

One hundred per cent efficient sleep is really one hundred per cent efficient subjective creative work. Only inefficient sleep is relatively rest; efficient sleep is intense, concentrated work.

Creative sleep can only be achieved consciously notwithstanding the apparent contradiction between the terms conscious and sleep.

This contradiction rests only on the fallacy of looking upon unconsciousness as one of the inherent attributes of sleep. It will evaporate as soon as man learns to promote

and control the subjective activities of perfect sleep, whilst retaining his consciousness.

As he acquires the art of promoting one hundred per cent efficient conscious sleep, man will discover that he is so increasing the volume of the echo to the Infinity of thought and energy and substance involved in him, that he may hope to attain in time the full knowledge of the unconscious realms, and of the Cause of Causes.

As he becomes acquainted with the nature of his performance of subjective functions, he will realize that in the majority of them he has, in the past, been unconsciously guilty of complete and laughable disregard of the laws of life, mechanically, dynamically, and mentally; substance, energy, thought; thus evolving an inefficient organism, wasteful of energy, unintelligently controlled. Being such a perfect clown, within, it is not in the least surprising that he should appear a perfect clown to all the other clowns around him.

Perfect sleep presupposes perfect mechanical, nervous and mental activity.

One of the fundamental mechanical functions during sleep is the circulation of blood, on which depends the sound evolution of the whole system.

The circulatory system, involving the heart (a pump), the blood vessels (a complex system of pipes of varying efficiency), and the blood, the whole submitted to varying pressures and resistances, must be subject to the laws of hydraulics and hydrostatics.

In simple form, the relevant laws are:

I. Water flows down-hill until it reaches bottom; it then assumes a surface parallel with the curvature of the earth. Any attempt to raise it above the level of that surface, involves expenditure of energy.

II. The amount of energy required to propel a given quantity of water through a given length of pipe in a given time, all other conditions being equal, is governed by the diameter of the pipe, e.g. other conditions being equal, the propulsion of any quantity of water through a pipe one inch in diameter will consume 3.17 times more energy than its propulsion through a pipe two inches in diameter.

These laws must be taken into account before sleep can become mechanically one hundred per cent efficient.

First Law: The body must be horizontal.

In the absence of extraneous support, any departure from the horizontal involves muscular contraction, objective work, implying expenditure of energy, conscious or unconscious. Any such expenditure is irrelevant to sleep and must be eliminated before it.

Departure from the horizontal involves the heart in additional expenditure of energy to overcome gravity. The objection that pressure in a sealed vessel nullifies this is not tenable, as blood pressure demonstrably varies in an individual from time to time and limb to limb, and the simple experiment of holding one hand raised high above the head, and allowing the other to hang by the side of the body, will clearly prove the effect of gravity on circulation. Any unnecessary expenditure of energy on the promotion of circulation, must be eliminated before sleep can be one hundred per cent efficient, since circulation of the blood is of value only as a permissive process, one that permits of other processes following, every single one of the latter requiring energy for its performance, and every unnecessary expenditure of energy reducing the available store of it.

Nature takes this law into account when she gives all living things the INSTINCT to adopt a horizontal position whenever tired, sick, or injured.

Second Law: The body must be and remain objectively relaxed.

Any expenditure of energy on the promotion or maintenance, conscious or unconscious, of objective muscular contraction must be eliminated before sleep can be one hundred per cent efficient. It is irrelevant to sleep and reduces the amount of energy available for sleep processes.

Such contraction, whatever its nature, degree or cause, involves a more or less marked inhibition of circulation, since it leads to contraction and diameter-reduction of the blood vessels affected, and thereby imposes unnecessary and avoidable work and strain on the heart, again reducing the store of energy available for other processes.

The actual cost of objective muscular contraction, conscious or unconscious, during sleep, will be made apparent if we assume for the sake of illustration, that a given individual is provided with one shilling's worth of energy per minute during sleep. Of this the heart spends sixpence per minute, leaving the remaining sixpence for the performance of other processes. If the individual, consciously or unconsciously, expends fivepence out of the remaining sixpence to promote or maintain objective muscular contraction involving proportionate inhibition of circulation, not only will he reduce to one penny the amount of energy available for vital processes following on circulation, but he will actually neutralize fivepence out of the sixpence spent by the heart. His account will read—Energy spent: heart, sixpence; objective muscles, fivepence; total, elevenpence. Useful circulation work, one penny; available surplus for all purposes, one penny; total waste, tenpence. Result: Expenditure, elevenpence; work produced, one penny; reserve, one penny. He will sleep, but he will hardly do any work; his sleep will be inefficient, wasteful unconsciousness; it cannot possibly be recuperative, less still, creative.

If, on the contrary, he completely eliminates objective muscular contraction and its concomitants, waste of energy and inhibition of circulation, his account will read—Energy spent: heart, sixpence; no other expenditure. Useful circulation work, sixpence; available surplus for other purposes, sixpence; waste, nil. Result: Expenditure, sixpence; work produced, sixpence; reserve, sixpence. That is: for 6/11ths of the former expenditure he obtains six times the amount of work, and a surplus multiplied by six. He will sleep, he will do at least sixpence worth of work. His sleep may be efficient, recuperative, even creative, provided he makes the right use of the remaining sixpence available.

The body must be and remain objectively relaxed.

That is: 'My dear lady, or my dear sir, you must relax, you must let go, you mustn't be so tense, you musn't worry, you must forget things, and then you will be all right.'

The painful platitude that so many poor sufferers have heard time and again, apparently so simple, served up

again! Why is this advice, evidently so sound, apparently so simple, so very seldom followed?

The reason is not far to seek. The problem has never been 'How to relax, how to let go?' Relaxation is but a negation, a bauble, a surface thing, a very tantalizing will-o'-the-wisp that never had a being of its own and therefore never will be caught. Relaxation is the feeling we experience, when we stop contracting, and which we should never notice unless we had previously been contracted. It is negative and relative, and results merely from the more or less marked reduction of contraction, which is positive. Relaxation is a state of relative objective inactivity; contraction is a state of relative objective activity, at times desirable activity, at times harmful, destructive, even fatal; but the reduction of contraction is the only source of the consciousness of relaxation.

As soon as this is understood, the problem appears in its true light. It is not: 'How to relax?' It is not even: 'How not to contract.' It is simply: 'What are the unconscious causes of contraction? How can they be eliminated, neutralized, overcome?'

Contraction is always the same phenomenon, it changes only in degree, but its causes are numberless. They fall under four categories, each one of which is easy to define. The elimination of the cause of any one of the four categories leads to the elimination of only that portion of contraction for which it is directly responsible. Until all four causes of the four categories of contraction have been separately dealt with, the individual will remain the victim of contraction in a more or less marked degree, and his subjective activities will remain inefficient in like proportion.

I. The first cause of contraction, is a conscious and deliberate act of the mind promoting objective muscular contraction for the purpose of objective work. This first category is: Conscious-Physical.

Contraction of this kind persists after every kind of physical exercise, and is not to be confounded with muscular fatigue, soreness or stiffness. Its cause is an order issued by the mind to the body, such as: 'Alternately raise the legs

forward, knees rigid, toes pointing out.' This amounts to goose-stepping. It would appear that the initial cause o contraction being the order: 'Goose-step, mark time,' the order: 'Now go and lie down and rest,' should be sufficient to eliminate in a short time any trace of the contraction caused by the first order. Experiment will show that this is so only in rare cases.

When a man lies down after exercise with the intention of resting and is addressed as follows: 'Please order every muscle in your body to relax completely, and let me know when you think your muscles have obeyed you, so that I may test the amount of obedience secured,' if his mind has been obeyed, his arms and legs will be quite limp, and if one of his limbs be raised, it will fall limply as soon as support be withdrawn. As a matter of fact, even after such a clear description of the degree and type of relaxation expected, the limbs, when deprived of support, will remain in the air, sometimes in odd positions; the subject will be quite unconscious of the fact, and may even express surprise when informed of it. If the subject's leg be raised by a hand placed under the back of the knee, the whole leg will come up rigidly, the knee in many cases, repeatedly disobeying orders to relax and bend.

How serious a waste of energy this unconscious continuation of objective contraction entails, will be obvious when one realizes that such conditions often persist even after several hours of so-called sleep. During the whole of that time, there is not only serious waste of energy, but there is as well a constant and proportional inhibition of circulation itself, and of various processes dependent on it.

It is wise to enquire whether failure to relax is due, not to the fact that the order selected may be unsuitable, but to faulty appreciation of what exactly the faithful carrying out of that order entails. Is not the relative efficiency of distinct individuals in goose-stepping, really due to the relative clearness of their conception of what goose-stepping really means? Is not the relative efficiency of distinct individuals, in eliminating the unconscious continuation of objective contraction, really due to the relative clearness of their conception of what this elimination really means?

The apparent insufficiency of the order: 'Lie down and rest'—to promote elimination of the unconscious continuation of objective contraction, lies in relative unconsciousness of what rest really means.

This will be established beyond doubt by the simple experiment of gripping the subject's guilty leg or arm, and shaking and bending it repeatedly, so as to loosen it and so as to make the subject understand, sense, what form of condition is intended by relaxation. Once this is sensed by the subject, it will ever remain easy for him to repeat the action unaided.

He will have learned once and for all, how to eliminate the unconscious continuation of objective contraction of the conscious-physical category.

II. The second cause of contraction is a physiological condition, and its action is made obvious by unconscious metabolic changes, following on the elimination of the unconscious continuation of objective contraction. This second category is: unconscious-physical.

To appreciate the exact nature of the form of contraction produced by this cause, it is essential to bear in mind that muscles work in pairs; that is, that all over the body, and in every limb, the contraction of one muscle is accompanied by a corresponding relaxation of its opposite member, so that whenever a limb is in a position of apparent repose, this condition is maintained only because contraction and relaxation are balanced.

This condition of apparent repose merely connotes equilibrium of forces, and never is in any way an index of the actual degree of contraction or relaxation of both muscles, but only of their relative contraction. Putting it in mathematical form, we may assume that the maximum contraction of both the biceps and the triceps involves the expenditure of 100 units of energy in each, and that the complete elimination of any expenditure results in complete relaxation of both, which alone is real repose. Let us assume further that bringing up the forearm until it forms a right angle with the upper arm, involves an expenditure in the biceps of 10 units in excess of that on the triceps. Under these conditions the right angle position will be maintained

as long as the difference of 10 units is maintained, whether the respective biceps and triceps expenditures be 100 and 90, or 10 and 0. This law governs conscious muscular contraction, but it must be assumed that when the subject has learnt to free himself before rest of even the unconscious continuation of conscious objective contraction, and his arm, apparently at rest, still maintains the right angle position, this position merely connotes an equilibrium of forces, although the forces in play are not consciously applied, and that the respective biceps and triceps expenditures must still differ by 10, whether they be 100 and 90, or 10 and 0.

As long as a limb displays incomplete relaxation during sleep, some unconscious cause of contraction must be at work.

That unconscious physical causes of objective contraction are still in operation even when all unconscious continuation of conscious objective contraction has been eliminated, is proved by the fact that in sleep some unconscious movements of an arm (until then resting at a right angle) occur merely as a result of increasing relaxation in either the biceps or triceps, although it may appear to be due to an increase of contraction of the opposite member.

Any such movement is caused by chemical changes in the muscles concerned, whether this cause be given the name of tone, or toxin, or that of any other agent capable of producing contraction, or relaxation.

That this cause of contraction is unconscious in no way alters the fact that contraction inhibits circulation in proportion to its gravity, and that this inhibition, although it may be overcome after many hours of so-called sleep, will only recede gradually, and may remain quite marked at the end of a long night, unless suitably dealt with before sleep, the subject feeling proportionately tired on waking.

It can be completely removed consciously in a few seconds, so that from the very first moment of sleep there shall be no inhibition of circulation whatever, and metabolism shall proceed under favourable mechanical conditions. In this case also, Nature comes to our assistance with one more INSTINCT, the instinct to stretch.

She gives the instinct to stretch to all living things, in order to reduce expenditure of energy on unnecessary processes, and to produce a better and more economical use of that which is devoted to essential processes. Although Nature so wisely provides the instinct, many causes are at work making man deaf to its promptings, the chief of which is the acute tension generated in most adults by our most exacting civilization.

Efficient stretching before any period of conscious or unconscious rest removes from the muscles to which it is applied all traces of that portion of contraction which is produced by unconscious-physical causes.

Efficient stretching is an art of which most of us are absurdly ignorant. Nine men out of ten, when asked to stretch, proceed to contract at least one muscle out of every pair. This only tends further to inhibit circulation. The biceps is contracted to stretch the triceps, the muscles of the back to stretch those of the chest, the arms and legs are bent and held taut in their position.

How different and more perfect is the stretching of animals, particularly felines. A cat, as it prepares for rest, stretches its forelegs without bending them, thereby obtaining a stretch of both muscles in each pair at the same time, and for less exertion, instead of a stretch in one and contraction in the other. It appears to devote to the process what may be to it the equivalent of conscious thought, as it deals with each pair of muscles singly and successively. A muscular ripple of stretching travels from the shoulder all the way down to the thumb-claw, and then to each one of the other claws in succession, and this is followed by a comprehensive stretch of the whole limb. The same method is followed with the hind legs, and in most cases, only after this is the trunk dealt with. A wave of stretching, starting from the shoulders travels all the way down the back until it reaches the hind quarters, and is followed by a similar wave travelling all the way down the chest and abdominal wall. The cat then lays itself down, carefully adjusting each member so as to secure the maximum of relaxation, all physical causes of contraction, both conscious and unconscious, having been eliminated.

This example of perfect stretching before rest should be followed by man, if he wishes to secure subjective efficiency on the mechanical plane during sleep.

The following is a simple routine, which need not take more than a few seconds:

(1) Lie on the back, both arms loosely expanded in the form of a cross, and concentrate on the sense of relaxation in the whole body. Then

(2) Stretch both thumbs as far as possible, keeping the arms straight, and then make sure, by careful attention, that all the muscles connected with the thumb, from the shoulder down, are stretched to the utmost possible length. Follow the same procedure with each of the four fingers separately in both hands jointly, and with all the muscles connected with them, all the way from the shoulders down to the finger tips. A final comprehensive stretch of both arms and all fingers together is advisable.

Still on the back, raise the chest, abdomen and hips, so as to form an arch supported by the shoulders and heels. Accentuate the arch, piecemeal. Start at the shoulders and attend in succession to the stretching of the muscles of the chest, pit of the stomach, abdominal wall, front of the thighs, shin, top of the foot and toes, and then allow the whole body to drop, completely relaxed. Sit up and bend forward, endeavouring to touch the toes with the finger tips, whilst holding the knees straight, and starting at the base of the skull, attend in succession to the stretching of the back muscles of the neck, shoulders, ribs, waist, hips, thighs, calves, and soles of the feet. Rest on the back, and relax the whole body.

Too much importance cannot be attached to the need of concentrating attention, for a short time, on each part in succession, as this tends to promote the most essential factor of improved subjective activity: increased consciousness.

It is advisable, with the same end in view, to rest for a short while after stretching the arms, the front and the back of the body, and carefully to register the subjective effects produced on each part.

The elimination of the first two categories of causes of

contraction, Conscious-physical, and Unconscious-physical causes, produces the following results: reduction of expenditure of energy on objective processes followed by proportionate increase of expenditure of energy on subjective processes; reduction of consciousness of objective processes as an effect followed by proportionate increase of consciousness of subjective processes, resulting in new possibilities of conscious control; a loss of consciousness of the outside 'relatives', time and space, and a proportional gain of consciousness of the inside; a deep sense of physical rest, and, with it, a sense no less deep, of intense physical work, within.

Two categories of causes of contraction remain to be dealt with, conscious-mental, and unconscious-mental causes of contraction.

Chapter 5

HUMAN ENERGY

The elimination of Conscious-physical and Unconscious-physical causes of objective contraction establishes conditions that allow the blood to circulate during rest with the minimum expenditure of energy.

Circulation, however, is a merely permissive process. Although it is essential before a number of vital processes can develop, it is by itself incapable of promoting them, and their performance requires motive and directive forces outside of it.

That efficient waiters present attractive dishes to various guests is a merely permissive fact. Although it is essential before a number of gastronomical processes can develop, it is by itself incapable of promoting them, and their performance requires the action of appetite, or other motive and directive forces, in the epicures concerned.

That numberless efficient blood vessels carry abundant and excellent blood through the whole of our tissues, and present the varied fare contained in this blood to the myriads of cells in our bodies, is a merely permissive fact. Although it is essential before a number of vital cell processes can develop, it is by itself incapable of promoting them, and their performance requires the presence and action, in the cells, of motive and directive forces additional to it.

To perform these processes our cells require, firstly, motive energy proportional to the amount of work involved, and secondly, a directive force for the wise and harmonious control of:

(1) Selection from the blood stream of material suitable for individual cell needs,

(2) Absorption of materials selected in appropriate quantities,

(3) Assimilation of these materials for efficient individual cell repair, growth, multiplication and function.

Blood is conveyed to the cell by the blood vessels; energy by the nervous system.

The essential centre of the blood circulation system is the heart; that of the nervous system, the brain.

The requirements of blood circulation are: a sufficiency of sound blood, an efficient heart, and efficient blood vessels, free of obstructions and constriction.

Those of efficient nervous circulation are: a sufficiency of sound nerve force, an efficient brain efficiently controlled, consciously and sub-consciously, and efficient nerves, good conductors, properly insulated, free of interference.

The maintenance of a sufficiency of sound nerve force implies: high load capacity, efficiency in charging, intelligent and economical distribution and expenditure.

These factors undergo constant change, constant evolutionary processes. Every one of them is at all times capable of improvement, and liable to deterioration, these being the only alternatives.

The use of the terms 'nerve force' or 'nerve energy' may, to some, be rather misleading, as it may tend to develop in them the conception that nervous processes fundamentally affect the nature of energy itself. Energy is always fundamentally the same; there is only one energy, and the distinctions and differences we are pleased to attach to it, are merely distinctions and differences between the means through which the existence of energy is made manifest to us.

The nature and activities of the nervous system are easily understood when compared with those of a telephone system.

The use to which energy is put in the telephone is strictly limited to the reproduction of sound at a distance, whereas that to which it is put in the nervous system includes every activity of man on the physical plane, and will continue to do so, whatever new physical capacities he may develop in the course of his evolution.

The telephone system comprises a central station or exchange, with which are connected the various subscribers.

The nervous system comprises a central station, the brain, with which are connected the various organs and limbs.

In the telephone, the central station is connected with each one of the subscribers by a double set of wires, one wire carrying an electric current from the central station to the subscriber, the other from the subscriber to the central station.

In the nervous system, the brain is connected with each one of the parts of the body by a double set of nerves, one nerve carrying an energy-current from the brain to organ or limb, the other from organ or limb to the brain.

The central station holds a store of energy, to supply that energy to subscribers according to their needs, and to establish communication between one subscriber and another, so that they may act on each other, and cause each other to react in a suitable manner. The central station is not intended to connect any subscriber with more than one other subscriber at the same time.

The brain holds a store of energy, supplies that energy to the various organs and limbs according to their needs, and connects one organ or limb and another or others, so that they may act on each other, and cause each other to react in a suitable manner. Unlike the central telephone station, the brain is intended to connect any number of organs or limbs with one another at the same time, and in addition to the functions of the central station, it exercises those of a censor and interpreter of the conversations taking place.

Each one of the two wires connecting the central station with a subscriber can be used for the transmission of messages in one direction only. The subscriber cannot usefully listen to the mouthpiece of his apparatus, or speak to its earpiece.

Each one of the two nerves connecting the brain with an organ or limb can be used for the transmission of messages in one direction only. The brain cannot by means of a sensory nerve convey to the hand the order to grasp an object; the hand cannot by means of a motor nerve convey to the brain the information that it is being burned.

The only means by which the exchange can act on the

subscriber is the subscriber's earpiece, hence all wires conveying current from the exchange to subscribers terminate in those subscribers' earpieces.

The only means by which the brain can act on the hand are the muscles of the hand, all human movement being produced by muscular action. All nerves conveying current from the brain to organs and limbs (efferent, or motor nerves), terminate in muscle or mobile tissues.

The only means by which the subscriber can act on the exchange is his own mouthpiece, hence all wires conveying current from subscribers to the exchange originate in those subscribers' mouthpieces.

The only means by which organs or limbs can act on the brain, and through the brain on other organs or limbs, are the afferent or sensory nerves which originate in them.

Motor nerves predominate in more muscular tissues, such as the muscular tissues of the palms of the hands, and sensory nerves in those less muscular, such as the sensory nerve endings in the less muscular tissues of the backs of the hands.

When the subscriber's earpiece is at rest in its support, the electric current does not circulate, and therefore the subscriber can neither hear nor speak to the exchange.

When the subject is asleep, the energy-current does not circulate in those nerves concerned exclusively with objective activities, or circulates in them only in proportion to the continuation, conscious or unconscious, of objective activities. Therefore the limbs and senses can neither hear nor speak to the brain, the subject can neither act nor sense, objectively.

The subscriber's act of raising his earpiece from its support sets the electric current in motion.

The subject's act of awakening sets the motor and sensory energy-currents in motion, and prepares his organism for objective activity.

The fact that the subscriber has set the electric current in motion does not compel him to use it. When he speaks, he uses current in proportion to his speech, the remainder of the current going to earth.

The fact that the subject has set his motor and sensory

currents in motion does not compel him to use them. He may both act and sense, but need not do either. If he acts, he uses current in proportion to his action, the remainder of the current being dissipated outside the organism, leaving the system by the motor nerve endings or terminals.

If no work be done by parts concerned exclusively with objective activity, the whole of the energy-current circulated through them during that time will pass out of the nervous system by the motor nerve endings or terminals.

Severance of the nerves carrying energy-currents from the brain to an organ or limb, say the hand, prevents it from being acted on either by the brain or, through it, by any other organ or limb. It still permits of its action on both the brain and any other organ or limb, through the channel of its sensory nerves. The limb will tend to atrophy, which will result eventually in a reduction of efficiency of its sensory nerves. The hand will still be able to convey to the brain the fact that it is being burned, which may then lead to action on the part of the legs, resulting in the withdrawal of the hand from the fire. But the hand itself will not play any active part in this withdrawal.

The converse also holds good: the severance of the nerve carrying the energy-current from an organ or limb, say the hand, to the brain, prevents the brain or any other organ being acted on by the hand. It still permits of the brain, or any other organ or limb, acting on the hand through the channel of its motor nerves, but this action will never take place as a result of sensory messages from the hand, and the interruption of the sensory energy-current from the hand will so react on the limb, through loss of consciousness, that it will tend to disuse.

That portion of the motor energy-current which through rest in parts concerned exclusively with objective activity passes out of the nervous system by the motor nerve endings or terminals, is lost to the nervous system. It adds itself to the objective store of energy outside of the body.

This loss can be eliminated before sleep by obedience to one more INSTINCT, the instinct to answer the call of polar attractions, to obey the laws of polarity.

Nature gives the instinct to obey polar attractions to all

living things. She does so by inducing them to connect motor nerve terminals with sensory nerve terminals.

We obey the call of polar attractions whenever we clasp the hands, and thereby connect the motor nerve terminals, situated in the inside of the hands and fingers, with the sensory nerve terminals, situated in the backs of the hands, and vice versa.

We thus close two energy circuits, the current passing out of the right hand motor nerve terminals (say, plus) being reabsorbed, through the sensory nerve terminals of the left hand (say, minus), and vice versa, and being returned to the brain by the sensory nerves, there to be stored and held in readiness for distribution to any organ or limb, as need arises.

This produces the phenomena which usually result from the linking up of positive and negative poles, although the observation and detection of them by individuals in themselves, may vary in definition, from individual to individual, and in the same individual, from time to time.

Not only does nature give us the instinct to obey the call of polar attractions by clasping the hands and crossing the feet or legs, but in definite cases she so specializes the application of this instinct, that she makes us lay the inside of the hand on any part of our own body, or some one else's, which, owing to injury, disease or fatigue, happens to need an abnormal supply of energy. In headache, earache, toothache, eyeache, backache, etc., the tendency is to lay the inside of the hand on the seat of the pain, obedience to this instinct being as marked in sleep as in wakefulness. In sleep, it may be a very subtle, though unconcious, help to diagnosis. No one would dream of laying the back of the hand on the seat of disorder, this practice being resorted to only when the hand is used sensorily, as when one seeks to ascertain or reduce the temperature of one's own or some one else's head.

Not only does nature give us the instinct to obey polar attractions, by clasping the hands and crossing the feet or legs, but she does so with great adaptability to needs, as is shown by the following example: when a man is cold or devitalized, his tendency is to shorten both the arm and leg

circuits, by folding the arms and crossing the legs high. As he gets warmer and revitalized, he expands both circuits, until only the hands and feet remain in contact, and he does so whether awake or asleep. Eventually, when his needs of energy have been satisfied, the hands and feet will be separated, and ultimately spread-eagled.

Efficient application of the laws of polarity, before any period of conscious or unconscious rest, reintroduces into the nervous system that portion of the energy-current which passes out of it unused through the motor nerve terminals, and ensures that, from the very commencement of any cycle of rest, the store of energy shall be at a level which could hardly be reached after many hours of so-called sleep, and which, other conditions being favourable, will make efficient subjective activity possible.

Unfortunately, this efficient application of the laws of polarity is an art of which most of us are ignorant. Nine men out of ten answer the call of polar attractions in a more or less marked state of muscular contraction, which not only inhibits blood circulation, but consumes the energy-current carried down the motor nerves of the limbs contracted, leaving no unused surplus whatever for reintroduction into the nervous system. Many of us, when laying the inside of the hand on any aching part of the body, such as the jaw in toothache, consciously or unconsciously apply considerable pressure of the hand. This pressure not only interferes with free blood circulation in the part, but since it requires muscular contraction in the arm and hand, it involves the expenditure in muscular contraction of the very energy-current which nature is endeavouring to transfer from the motor nerve terminals of the inside of the hand to the affected part of the jaw. The hand should rest on the aching part in a state of complete relaxation, no pressure of any kind being applied, and no single arm muscle being contracted. This will allow of free circulation in the jaw, free transference of unused motor energy from the hand to the jaw, and result in higher efficiency in the tissues affected, as experiment will show.

Not only does man show ignorance in his conscious and unconscious application of the laws of polarity to himself,

but when he does apply them, it is only in answer to a call for repair given him by nature in the shape of pain or fatigue. That is, he is improvident and acts on the principle that cure is better than prevention.

If he but bear in mind that failure in metabolism, his essential physical subjective occupation during sleep, is due not exclusively to insufficiency of blood circulation, but in no less a measure to insufficiency of motive energy, he will develop a technique of conscious preparation for rest, which will first provide him with an ample supply of motive energy, and then ensure its efficient distribution to all parts of the system, in proportion to their respective needs, and its correct use by each part in work of repair, and creation.

The conscious application of the laws of polarity by man to himself, before every cycle of rest, should be preceded by the conscious elimination of the two categories of causes of contraction, dealt with in the previous chapter: Conscious-physical and Unconscious-physical, and it is assumed in any further argument, that these two requirements have been complied with.

It is assumed that before endeavouring consciously to answer the call of polar attractions in himself, in an intelligent and efficient manner, the subject has consciously performed exercises (1) and (2) described on page 73.

Having completed (1) and (2) and carefully registered their results, the subject should devote his attention to the following:

(3) Still relaxed and on the back, clasp the hands, and cross the feet. Register in the mind the impressions and sensations that develop as a result.

The laws of polarity would lead one to expect the registration by the subject of certain impressions and sensations in keeping with the normal results of compliance with polar attractions, such as: the sensations of current entering the hands and feet; increasing activity and warmth in the hands and feet, current activity and warmth travelling upwards along the arms and legs to the shoulders and hips (a tendency the exact opposite of that of warmth produced by returning blood circulation after the limbs have got cold); current activity and warmth travelling up the neck

into the head. After the brain capacity has been exceeded, overflow into the nervous system generally, through the motor and efferent nerves; general activity and warmth, and when the current transmission reaches a sufficiently high level, polar attraction between the hands, these seeming to cling to each other.

In practice, the impressions and sensations just described are duly registered, but as in previous cases, results vary with efficiency, their detection varies, and both results and detection improve with repetition and time.

In the majority of cases, these sensations and impressions become apparent in the following order, although many factors may affect the order of their conscious registration.

The first sensation generally registered is that of an increase of warmth in the hands and feet, or in any part of the body on which a hand is laid, followed by a sensation of relaxation and increased metabolism consistent with local hyperæmia (increased circulation). On percussion, a duller tone is produced, increasingly dull as relaxation and hyperæmia become more marked. A faint sensation of tingling may then be detected, such as might be produced by the passage of a weak electric current.

The next sensation to be registered is generally that of increasing warmth, metabolism and hyperæmia, in the head, spreading to the skin, which then becomes flushed and glowing. Only then in most cases, does the subject register the fact that the sensations of weak electric current, increasing warmth, metabolism, and hyperæmia, travel upwards from the hands, gradually spreading to the wrists, elbows, shoulders, neck and base of the skull. This order of registration of phenomena from the extremities inwards, clearly shows that their cause is not blood circulation, the registration of which would progress outwards, but energy, which progresses inwards from the point of its reintroduction into the system.

The next sensation registered, produced by the overflow of energy from the now fully-loaded brain, to the whole system by way of the motor and efferent nerves, is a general sense of weak electric current, increased warmth, metabolism, and hyperæmia. In most cases, then only can

the sensation of polar attraction between the hands be detected, these apparently and automatically resisting separation, more or less. This phenomenon, though very faint in most cases, and particularly so in early stages, gradually becomes more marked, until in some instances, the subject may be unable to separate his hands unaided.

Too much importance cannot be attached to the need of concentrating attention for a short while on each part in succession as phenomena develop, as this tends to promote the most essential factor of improved subjective activity; increased consciousness of it.

The charging of the nervous system is in itself insufficient to ensure sound and efficient nervous activity, this requires efficient circulation and distribution of energy through the whole system, for both objective and subjective work.

These are interfered with by two categories of causes of contraction: conscious-mental and unconscious-mental causes. These are to be dealt with before we can master the art of promoting one hundred per cent efficient conscious creative sleep.

Chapter 6

THIRD CAUSE OF CONTRACTION

Conscious-mental causes of contraction are presumed to include every thought of which the subject may be conscious, and which, by its nature, tends to interfere with the efficiency of subjective activities, excepting those thoughts which are connected with the conscious or unconscious promotion or continuance of objective activity.

Although such thoughts are likely to be unpleasant, conscious thoughts of the most pleasurable kind are also liable to interfere with harmonious subjective activity.

Such thoughts are founded on real or imaginary impending or anticipated, past or future, events or conditions.

Any thought, feeling or condition, that may develop on this foundation, can only be obliterated, or overcome, by at least one of three eventualities: (1) the obliteration of the foundation-cause itself; (2) its obliteration from the subject's memory, or consciousness; and (3) a radical change of point of view on the part of the subject.

A man always slept like a child until he accidentally killed his father in a motor collision. His nights have since then been haunted by the ghastly face of the dying man, and by thoughts of self-reproach. He can only recover his former restful sleep as a result of at least one of three eventualities: (1) the obliteration of the accident itself, or its equivalent, the return of his father to life, unhurt; (2) the obliteration of the accident from his memory or consciousness, and (3) a radical change of point of view on his part, involving a thought such as: 'Father's death was to him a great relief, as he was dying of cancer, and had for a long time been praying for the end.'

This, so far as it goes, is true, but it is neither wholly true, nor the whole truth. A further anecdote will set yet other problems for our consideration.

It is mid-winter. It has been snowing heavily and a mild thaw has set in, leaving the streets a mass of dirty slush.

On the edge of the pavement stands a fat old woman with a trayful of the thousand and one little nothings that city men may lose or want: pins, buttons, collar studs. Nobody seems to have lost anything, or it is too cold for people to stop and buy. The old lady has not sold anything for hours. She looks very cold, her hands are blue and devoid of feeling, her cheeks are blue, too, and her nose is dripping.

Two good-for-nothings in boisterous mood, slouch along. The sight of the old dame with the comic face and the universal store, is too much for the sense of humour of one of them, and as he passes her, he quite casually gives her tray a push, sending the whole of its contents into the snow. In her vain attempts to save her treasure, our universal provider loses her balance and collapses on the mound of snow behind her, her legs wildly beating the air.

This undignified proceeding completely overpowers our humorist's boon companion, and his merriment is almost painful to behold as he doubles up, tears streaming down his cheeks, his risorial muscles entirely out of control.

But the mirthful scene is misunderstood by another passer-by, who happens to be cursed with an anæmic sense of the ludicrous. Without the slightest warning, and very much to their astonishment, he proceeds to box the ears of the two harmless lovers of fun, adding two well-directed kicks as the innocents depart. And as, very much damaged and bruised, they turn to survey the scene from a safe distance, their sense of what is meet and just receives a final shock as they observe him slipping a ten shilling note into the old lady's hand, a measure of compensation that would, by rights, appear to be theirs.

There are four actors in this little scene, the dame, the young humorist, his appreciative friend, and the pugnacious stranger with queer ideas about the apportioning of damages.

Let us forget the first two. For both of them, fate has completed its cycle. The universal provider has the wherewithal with which to replenish her stock, and will no doubt

hold a sale of shop-soiled goods; the humorist has had expended on him a sufficient quantity of energy to balance any he may have spent on upsetting the old lady's tray.

The other two, the sportsman's boon companion and the bellicose sentimentalist, are likely to provide us with the solution of more than one problem.

Both are witnesses of the same incident, both are submitted through their senses to the same action.

Yet, their reactions are diametrically opposed.

We are led to believe that action and reaction invariably equal each other, other conditions being equal.

The action in this case being the same, the cause of the different reactions must be sought in conditional differences in the subjects. Wherein do these differences lie?

Both subjects are made conscious of the incident through the sense of sight, and the efficiency of their vision may be assumed to be equal.

Both pairs of retinas register, at the same time, the self-same pictures, by the same bio-electric photographic process. These two pictures are then conveyed by the optic nerve to the centres of vision in the brain, by which they are in turn registered. They are then perceived coincidently by the consciousness of both egos.

So far, nothing but automatic processes of registration of identical nature, which cannot account for any difference in emotional reaction.

The two pictures are then presented by both egos to their respective unconscious reference departments, for comparison with existing records of memory, registration, judgment, and for promotion of action in accordance with the judgment pronounced.

This reference department is a compound of memory precipitates, and its condition is influenced and determined by two factors, heredity and environment, which jointly endow each individual with what may be termed 'his personal code of life harmony.'

The relative parts played by inherited and acquired memory in the production of this compound of memory precipitates do not concern us at the moment. The only fact worthy of note is that as a result of their joint and cumula-

tive action, every individual is provided, at all ages, with a distinct reference library, the contents of which are constantly being added to, the rate of change decreasing relatively as age increases.

The nature and magnitude of any emotional reaction, following the sensory perception of any incident or fact, is governed by the nature and magnitude of the discrepancy between the personal code of life harmony and the incident or fact, coupled with the state of the subject's nervous system at the time.

The possession of this code of life harmony leads us to receive from life, with a sense of fitness, balance and proportion, anything that happens to coincide with the articles of that code, and to show emotion, violent or moderate, pleasurable or distressing, favourable or inimical to healthy subjective activity, following any perception involving a breach of that code. The nature and magnitude of the emotion is in proportion to the nature and magnitude of the breach, other conditions being equal.

In the case of our humorist's boon companion, heredity and environment have combined to provide him with a code of life harmony which leads him to look upon disregard of the feelings of others, the infliction on them of physical hurt, the damage of their property, the ill-treatment of women, as perfectly natural, every-day, harmonious occurrences. When his eye is struck by the sight of the old lady's legs beating the air, his sense of humour is given free play, unhindered by any distressful consideration.

In the case of the pugnacious stranger, heredity and environment have combined to provide him with a code of life harmony which leads him to look upon the same set of facts as horrible and revolting breaches of one of the fundamental articles of his code. When his eye is struck by the sight of the old lady's legs beating the air, his sense of humour is not allowed to come into play, the distressful considerations having already taken complete possession of his emotional self.

Yet had his eye been presented with the same sight, by a clown in a circus, his emotional reactions would have been totally different.

The cause of the differences in the emotional reactions of different individuals to identical stimuli having been indicated, we must ascertain the nature of the subjective processes involved in those emotional reactions, and of their characteristics inimical to efficient subjective activity, before we can hope to free the system of their influence.

When the result of the comparison of the perception just registered with the subject's personal code of life harmony reaches the ego, it affects this ego in proportion to the nature and magnitude of the discrepancy between the perception and the harmony code, the ego reacting by setting in motion proportional brain processes which eventually lead to proportional emotional manifestations.

These processes vary both in nature and intensity, from the placid recognition of the fact that the perception just registered fits in with the personal code of life harmony, involving a minimum of grey matter disturbance and liberation and expenditure of energy, to the most vigorous appreciation of the fact that it differs extravagantly either for better or worse from the personal code of life harmony, involving grey matter disturbance and liberation and expenditure of energy on such a scale that loss of conscious control of the nervous system results.

Such brain storms are rare, but their rarity is in direct proportion to the diversity of post-natal imprints that have built up the personal code of life harmony, other conditions being equal.

That they are generally temporary is due to the unconscious initiation of readjustment of grey matter, replenishment of energy supply, and resulting re-establishment of mental balance.

Were these physical and energetic processes of re-establishment of mental balance not set in motion by the ego, at the same moment as the processes leading to the brain storm, and did they not develop their full efficiency at a rate proportionate to the rate of development of the processes leading to the brain storm condition, their belated initiation could only be undertaken by the ego with the help of an already disordered brain, and their development would be proportionately vitiated. The temporary condition of in-

sanity would become one of permanent insanity, and recovery, if attainable, would require a period of months or years, unless the subject were fortunate enough subsequently to meet with a compensating shock.

The initiation, development and control of balancing processes being left to the unconscious self, those processes are liable to suffer from any inefficiency of unconscious technique, and nothing but conscious cognisance of their function will enable the subject to correct and control this technique.

Since brain storm conditions involve extravagant grey matter disturbance and combustion, and liberation and expenditure of energy, the first requirement to be met is the replacement of the substance consumed, and the readjustment of the substance displaced. This involves an increase of blood circulation.

This first requirement is duly met by nature, in the accompaniment of all emotional disturbances, by a coincident increase of pulse rate, volume and power, proportional to the disturbance. She further provides that the larger portion of the additional blood so circulated shall be earmarked for the service of the brain, by producing in the system a condition of general muscular contraction, coincident with and proportional to, the emotional disturbance and its nature. This partially empties the veins, increases the amount of blood thrown into arterial circulation, and reduces the portion of the additional blood so circulated which is accepted by the body, thereby enforcing the acceptance of a larger portion of it by the brain.

This action may be registered by the subject, both in its development and its effects, the initial muscular contraction, sense of throbbing in neck and head, and rush of blood to the head that follow violent emotional disturbances, being quite obvious.

The second requirement is the replacement of the energy extravagantly liberated and expended, which involves the reloading of the nervous battery, the brain.

That these processes tending to re-establishment of mental balance are essential to the subject, in no way ensures their performance and development on the lines

best calculated to promote efficient evolution. Although their normal tendency is to re-establish mental balance, they are liable to such grievous technical errors that in many cases, far from leading to the desired result, they considerably aggravate the brain storm condition.

Increased pulse rate, volume and power, and general muscular contraction, are liable to depart from the happy mean, in timing, acceleration, deceleration, and magnitude, each such departure leading to further disorder in proportion to its gravity.

Take an example. Where the brain suffers from a condition of emotional disturbance, following the fact that the perception just registered differs from the personal code of life harmony in a serious manner, and where to this are added an excessive increase of pulse rate, volume and power and an excessive amount of general muscular contraction, both accelerating at an excessive pace and leading to a reaction vastly in excess of requirements, disastrous conditions must follow. The brain, considerably disturbed by the storm condition, is less able to stand shock than before. Whilst in this state, it is suddenly subjected to blood pressure in excess of its powers of resistance, caused by the extravagant increase in pulse rate, volume and power, and further added to by the exaggerated muscular contraction of the whole system.

The effect this may produce on the cerebral and mental condition of the subject varies, and may amount, amongst other things, to the rupture of a blood vessel, its complete or partial clogging, by matter disturbed by the shock, interruption of function in the brain centre affected, loss of mind, limb, or sense.

Where the immediate effects of emotional disturbance are of a less drastic nature, their ultimate repercussions may still be of the utmost gravity, in nature and in duration, and irrespective of the subject's consciousness of them.

The re-establishment of cerebral and mental control does not obliterate the memory of the sensory perception which led to the original emotional disturbance. It does not reduce the discrepancy between the perception and the subject's personal code of life harmony, or his natural aversion from

the perception, and his liability to be emotionally disturbed by its recall to memory.

Any such recall to memory tends to reproduce a condition of increased pulse rate, volume and power, and general muscular contraction akin to that generated by the first perception, and proportional to the vividness of the recollection, other conditions being equal.

Any repetition of such recall to memory, must, in proportion to its frequency and vividness, tend to the permanence of this condition harmful to subjective activity, and to the reduction of the subject's capacity to overcome it, and may lead eventually to its transformation into the obsession of a mind that knows no rest.

Let us cover the ground that separates the original perception from the eventual condition of obsession, and register clearly each link in the causal chain that leads to the ultimate effect.

(1) The fact to be perceived.

(2) Its registration by the sense organ.

(3) Its conveyance to, and registration by, the sense brain centre, by means of a nerve process.

(4) Its registration by the ego.

(5) Its comparison by the ego with the personal code of life harmony.

(6) The registration by the ego of the degree and nature of the discrepancy between the perception and the personal code of life harmony.

(7) Emotional and grey matter disturbance, liberation and expenditure of energy, brain storm condition, increase of pulse rate, volume and power, general muscular contraction proportional to the discrepancy.

(8) Either insanity, or re-establishment, rapid or gradual, of cerebral and mental balance.

(9) The recall of the perception to memory, with decreasing or increasing frequency and vividness, followed in the case of increasing frequency by

(10) Increased gravity and eventual confirmation of a condition profoundly harmful to the sound performance of subjective functions.

(11) An ultimate state of mental obsession, from which nothing but constant subjective inefficiency can result.

This condition of constant subjective inefficiency involves severe falling off in unconscious subjective technique and activity, in the following forms: a persistent state of more or less marked and more or less conscious muscular contraction of no utility whatever, involving wasteful and constant expenditure of energy, inhibition of circulation and its attendant evils, a more or less marked incapacity for sound thought due to exhaustion, and insufficient nutrition of brain cells, and incapacity for sound sleep.

The removal or alteration of the ultimate effect, the eleventh link in the chain, can be secured only by action on any one of the preceding links. Where action is applied to any preceding link in the chain, the earlier the link dealt with, the more radical the influence of this action on the ultimate effect.

Study of the chain will make it obvious that action on its earlier links is out of the question, their development being beyond the subject's control. Action on the later links becomes less and less effective, the later the link.

1st link: the fact to be perceived.

In the examples given earlier, those of the man who accidentally killed his father in a motor accident, and the pugnacious stranger who saw the old lady lose both her stock in trade and her balance, it is useless to attempt to erase the incidents that led to emotional disturbance and its sequels; the father is dead, the old lady has been upset. The first link is indestructible.

2nd link: registration by the sense organ.

Theoretically, the second link can be affected, at any rate before it reaches its full development. The subject may shut his eyes, or stop his ears, or pinch his nose, as soon as he realizes that an event unpleasant to him is materializing. But as such realization implies the completion of the chain up to and including its sixth link, at any rate for the earlier portion of the materializing event, it follows that action on the second link can at best be partial and relatively inefficient. The cowardly habit of shutting one's eyes to the unpleasant facts of life is fundamentally detrimental to

moral fibre, and no sounder advice can be given than that the more unpleasant the fact, the wider should the eyes be open, so that the fact shall be dealt with in full knowledge and efficiency. Practically, the second link is indestructible.

3rd link: conveyance to, and registration by the brain.

The third link in the chain, being purely automatic, cannot in any way be interfered with. The third link is indestructible.

4th link: registration by the ego.

Theoretically, the fourth link can be affected, at any rate before it reaches its full development. The subject may ordain that whilst his eyes, ears and nose shall remain open he shall neither look nor see, listen nor hear, scent nor smell, as soon as he realizes that an event unpleasant to him is materializing. But as such realization implies the continuation of the chain up to and including its sixth link, at any rate for the earlier portion of the materializing event, it follows that action on the fourth link can at best be partial and relatively inefficient. The cowardly habit of shutting one's mind to the unpleasant facts of life is quite as objectionable as that of shutting one's eyes to them. The fourth link is indestructible.

5th link: comparison with personal code of life harmony.

Theoretically, the fifth link can be affected, at any rate before it reaches its full development. The subject may, by self-deception, more or less conscious and intentional, persuade himself that a large discrepancy between the perception and the personal code of life harmony, is really quite a small discrepancy, or even no discrepancy at all, and thereby save himself, at least for a time, from part of the effects of the perception. This process of self-deception suffers from the same defects as those dealt with in connection with the second and fourth links, and is hardly worthy of the consideration of a self-respecting intellect. The fifth link is indestructible.

6th link: registration of discrepancy by the ego.

The sixth link is theoretically open to the same treatment as the second, fourth and fifth links, with minor variations and similar objections, and as in those cases, such treatment should be rejected without hesitation.

Let us now examine the later series of links in greater detail, with the object of discovering the weakest link in the chain.

11*th link: ultimate state of mental obsession.*

The eleventh link does not require consideration, as any attack upon it would alter its manifestations without affecting their causes, and could only react on any further developments of the chain as they eventuated.

10*th link: confirmation of condition harmful to sound function.*

The tenth link need not delay us, as any form of attack directed against it could with greater advantage be applied to the preceding link, its immediate cause, and one from which it differs only in degree.

9*th link: recall of perception to memory, with increasing or decreasing frequency or vividness.*

The ninth link, being merely a process of more or less accurate reproduction of the whole of the preceding series, from the first link to the eighth inclusive, it follows that attack on earlier links is likely to be more effective.

However, such attacks on earlier links, limited as they now are to the region of the seventh and eighth links, may in a great number of cases be prevented by circumstances, and the subject may find as a result, that his action on the causal chain must be limited, in the majority of cases, to an endeavour to eliminate, alter or neutralize the ninth link, the recall of the perception to memory and its effects.

We are left then with three links of the chain as offering us promising points of attack. Any action on these links having the effect of destroying the factors leading to disorder, overcoming or neutralizing them, or reducing their potency, or of increasing the efficiency of factors tending to re-establishment of order, is useful.

7*th link: the emotional and grey matter disturbance, the extravagant liberation and expenditure of energy, tending to disorder, and the increase of pulse-rate, volume and power, and the state of general muscular contraction, tending to re-establishment of order.*

8*th link: the resultant state of disorder or re-established order.*

9th link: the recall of the perception to memory and its possible effects.

The seventh link includes factors leading to disorder, and factors leading to re-establishment of order, which are both effects of the conscious perception of a *reality*, the first link in the chain, the fact perceived. The tenth link, and any others that may follow, are all effects of the perception by consciousness of an *unreality*, the ninth link in the chain, the recall to consciousness of the fact previously perceived, with either decreasing or increasing frequency and vividness.

Although the cause is a *reality* in the first case and an *unreality* in the second, it is not the reality or the unreality of it which governs either the nature or magnitude of the effect produced on the subject, but the vividness of the perception, whether it has reached consciousness through the eye, or through the recall of the perception from the store of memories.

It frequently occurs, that when a scene likely to cause either intense horror or joy to the subject, strikes his eye, the whole of the scene is registered by the retina, but only a portion of it, and not necessarily either the most horrifying or the most entrancing, is consciously appreciated by the subject in all its details and import. At a subsequent period, when the scene is recalled to consciousness, it re-enters it with a tendency to greater completeness and clearness of detail, which may become more marked with each recall, facts so far unconsciously registered, being then consciously registered, and gaining by this process additional emphasis and power to generate proportionately magnified reactions.

The repetitions of these recalls to memory result in a gradual re-adjustment of relief of details, eventually presenting to consciousness a picture in which details that were at first more or less negligible and lost in the background, are now found to stand out with great prominence and to push out of sight others which at the outset held the centre of the stage. The selection of the details to be so magnified or reduced in importance is not governed by the desirability of their emergence into the limelight, but by a multitude of factors for the time being outside the control

of the subject, and the effect of this uncontrolled emergence is harmful or beneficial according to the nature and relative prominence of these details, and is not governed by the reality or unreality of their initial cause.

An example from life will make this clear. A boy, aged four, was being taken to the seaside. He was walking with his parents from the seaside town station to their residence, when at a street corner, he was run over and hurt by a bicycle. Badly bruised and shaken, he was put to bed. Within a few days he had completely recovered. A year later he was once again being taken to the same place, when passing the scene of his accident he suddenly collapsed in a helpless condition. When picked up he had completely lost the use of the leg that had been injured the previous year. At the age of twenty-four that leg was useless and withered.

It is in the fact that the nature and strength of the reaction of the subject to a perception is based not on the nature and power of its objective origin, but on the nature and power of the picture of it formed by the subject, and contemplated by him, that we shall find our principal hope of attack on the seventh, eighth and ninth links of our causal chain.

If the recall to memory of either a horrible or an entrancing picture, is capable of producing in the subject a reaction which exceeds and implements, that called forth by the original perception, both in nature and in power, salvation lies in the conscious and deliberate alteration of the picture recalled, both in nature and in power.

Such alteration must tend to bring the picture into accord with the personal code of life harmony. Though conscious and deliberate, it need not involve the least degree of self-deception as to its objective origin, and the subject's acknowledgment that it is founded on unreality, need not impair its power to snap the causal chain, which, unbroken, might have led to mind disorder.

This alteration must be governed by the following rules:

To avoid all reduction of moral fibre, the subject must retain his full consciousness of facts, and make no attempt whatever to deny their reality or to minimize their gravity. He must then ask himself what is, according to his personal

code of life harmony, the fact which, should it eventuate, would re-establish complete harmony, and therefore bring his mind, nerves and muscles back into neutral position. He must then, by the conscious and deliberate control of mind and imagination, visualize this event actually materializing in his mind, and then contemplate it until balance of subjective function is re-established.

In practice the 'Law of Converse Thought' should be applied as follows:

Let us revert to the man unable to sleep because some years ago he killed his father in a motor accident. Having overcome physical-conscious and physical-unconscious causes of contraction and applied the laws of polarity, and recognizing the fact that his father is dead as a result of the accident, he asks himself what alteration of the picture would, if it took, or had taken place, be or have been capable of re-establishing harmony in his mind, according to his personal code of life harmony. Any alteration of the perception recalled, similar to the following, would meet the case:

Immediately after running into his father, the subject backs his car and jumps out of it to run to his victim's assistance. Meanwhile, the father, unaided, gets up, unhurt though rather dirty, brushes his clothes, and with a cheerful smile, remarks: 'By Jove! that was a narrow shave!' Having evolved this scene in his mind, the subject contemplates it, and then repeats the process a few times. Should his obsession be the only remaining cause of his insomnia, sleep may be secured in a very short time, his mind, nerves and muscles having been brought back to the neutral position by the neutralizing thought.

The man who saw the old street vendor upset, and is angered and kept awake by the memory, would alter the picture of his obsession as follows:

Immediately after he has upset her tray, the young hooligan dashes forward with his friend to help the old lady get up; they then pick up for her, with the utmost care, every bit of her stock in trade, and emptying their pockets, give her the few coins they possess, and leave her with deep expressions of sorrow, after having satisfied themselves that

she is not hurt in any way. As they depart, she gives them a friendly smile, indicating that she has forgiven them and is perfectly satisfied with the compensation she has received.

The repetition of the process of neutralizing the perception antagonistic to the personal code of life harmony by its alteration into one in perfect accord with it, ultimately leads to such an intimate welding of the two into one, that the former will never again appear alone, and will always be associated with its neutralizing counterpart.

The efficacy of the method, or its practicability, may be disputed, but when it is pointed out, that it has been used by all of us instinctively and successfully, though not as effectively as when consciously and deliberately applied, such doubts must vanish.

As with other practices previously recommended, nature takes the Law of Converse Thought into account when she gives us the INSTINCT to convert thought, whenever we are faced with distressing news. When we hear of the death of a dear one, the thought called up being that of death, it would not be surprising if it led to the visualization of the departed as a corpse, his real condition at the moment. In fact, the tidings of death, invariably lead us instinctively to conjure up a picture full of life, and many of us have been known to smile as the news of the death of a friend brought to our minds images fundamentally in keeping with the old adage: 'De mortuis nil nisi bonum.'

A few lines of dialogue will make this point as clear as day:

. . . 'I say, have you heard old Bob is dead?'

. . . 'You don't mean it? Why, only last week I had two rounds of golf with him, and he seemed as fit as a fiddle! He was awfully cheery and happy.'

. . . 'Yes, wasn't he a cheerful lad? Jolly good company and all that.'

. . . 'Topping fellow! He is dead, is he? Such a good fellow. Always laughing.'

Here we have that curious see-saw between the evil perception disturbing balance, and the converse thought that re-establishes it, by bringing mind, nerves and muscles back into the neutral position. The converse thought

eventually triumphs, and enables us to face the trials and difficulties of life.

Although instinct is ever at work, promoting the conversion of thought for our good, both in connection with past events, as when the thought of death conjures up that of life, and with anticipations of the future when 'hope springs eternal in the human breast', its corrective action lacks the guidance of conscious intelligence, and can be very considerably improved by deliberate application of the law.

The simplest form that such application may take, is: 'playing the film of life backwards.' The following illustration of the process will be made both illuminating and convincing, if it be read to an assembly of about twenty, whose facial expression, breathing and pulse changes, may be noted as events unfold themselves in the tale.

John Masters was an extraordinary fellow. I had met him in the war, during a heavy bombardment, taking shelter in a small dug-out. Things had been unpleasant for some time, when suddenly we heard the heavy dull thud of a 'dud' landing just outside the dug-out, and found ourselves covered with mud. John's only comment, as he wiped the mud off his face was: 'Tactful!' The war over, he went back to his old job, topical cinematography. He spent his days going from one important function to another, from a fire to a wedding, from a murder to a fashionable divorce, accumulating pretty varied experiences, and as I was to discover, learning to be the wise man who may feel, but never shows, surprise at anything.

One morning he agreed to take me along with him for the day. One of his jobs was to take pictures of the biggest social wedding of the year at St. Margaret's, Westminster. We got there a little before the bride was due, and found a large crowd. John took up a good position, and every now and then gave a few turns of his handle as some interesting people appeared. The police occasionally stopped the traffic to let the crowd pass, and then there was a wild rush to get across the road nearer the church door. As the traffic moved on again, some laggards escaped only just in time to the safety of the pavement.

Suddenly, at the end of one of these traffic stoppages, there was a yell. Women shrieked. Some fainted, and there was a stampede. A boy had slipped just before getting to the pavement and a bus had passed over him, one of the front wheels crushing his head! All that was left was an indescribable mess of flesh and blood. I felt sick. Cold sweat poured off me. I throbbed all over. I looked at John. He was still quietly turning the handle of his camera, completely master of himself. At first his attitude revolted me. Then I felt the only explanation could be, that having had to witness so many horrors, his emotional self had become dulled. I was, however, to know better before the day was over.

John finished the wedding, told me he had to get his films developed and tried, and asked me to come and watch it done. I told him I did not want to see this horrible scene again, but all he replied was: 'Oh! that's all right!'

We took his films to be developed, and then had some food. Later, we went to watch the films, but only after I had got John to promise I should not be asked to witness again the distressing scene of the morning.

To my disgust, the first thing I saw was the bus at rest over the dead boy. This it struck me was not playing the game, and I was going to say so when John said: 'Look! you fool!' I looked. To my amazement the scene was put on backwards! The end of the accident came first. The bus had stopped. The mess of flesh and blood lay on the ground, indescribably revolting, the morbid crowd leaning forward. Suddenly the bus backed, and as it did so the human *débris* gradually came together again. The boy came out from under the wheels, and, full of life and energy, ran backwards to the pavement!

What staggered me was that I suddenly discovered myself smiling, if not actually laughing, and heaving several sighs of relief. All sense of horror had left me. I looked at John. He grinned broadly, and seemed just as happy as I was; and as he gave me the moral of his lesson, I understood the reason of his imperturbability: 'You see, if you will only cultivate the habit, whenever you see or hear anything which upsets you, of immediately visualizing the

film of it as if it were being put on the screen backwards, and then watch it going forward again, and immediately reverse once more, and repeat this two or three times, you will find that your nerves will never remain upset for more than a few seconds. Your balance and control will remain unimpaired, and whenever the memory of the unpleasant image returns to your mind, the converted picture will have become so intimately associated with it, that the two will always come up together, and your mind will be left in neutral, so to speak.'

This tale is, of course, pure invention; but whether it be invented or real, those who listen to it are mentally disturbed, nervously tense and muscularly contracted, their heart action is disorderly and breathing inhibited, in more or less marked degree, during the first part of the tale. All this is harmful to efficient subjective activity. During the second part, the law of converse thought is obeyed and they are mentally relieved, nervously and muscularly relaxed, their heart and lung actions return to normal, and they heave sighs of relief. All this is indispensable to efficient subjective activity. This result invariably follows the application of the law of converse thought, irrespective of the subject's belief or disbelief in the reality of the converted image, and therefore the success of this process in no way implies the least measure of self-deception, any more than the relief found in the thought of a loved one as he was in the full enjoyment of life, in any way involves the belief that he has risen from the grave.

Complete mastery over the process, and its development to the level of an almost automatic reaction, can only be achieved through deliberate practice, and efficiency will best and soonest be reached, if the principle be first applied to the trifling annoyances of daily life, roughly as follows:

A maid upsets a glass of wine, and spoils a brand new table centre. Visualize the wine running back into the glass, and the glass righting itself. Do it two or three times, and then look at the stain and you will observe that nervous tension and annoyance have subsided, and that you are heaving a sigh of relief.

A man insults you, watch him apologizing for his words

and withdrawing them. Do it two or three times, and the same result will follow, for the good of your nervous system.

You have missed a train. Watch yourself catching it—'by the skin of your teeth!'—or watch it returning to the station backwards. Once more the same effect will be obtained.

Facts will not have changed, nor your belief in their reality. Your condition, mental, nervous and muscular, will have been improved beyond recognition, almost instantaneously. In this recovered mental balance and self-control will be found a greater capacity for dealing with the unchanged facts.

It is unnecessary to apply these principles when the facts perceived tend to promote healthy function and emotion; for instance, ample breathing and laughter.

But, they should never be overlooked in one's preparation for one hundred per cent efficient sleep, in connection with any thought or memory, which is likely to interfere with sound subjective activity. Their application will inevitably lead to the elimination of the third category of causes of contraction, Conscious-mental causes.

Chapter 7

FOURTH CAUSE OF CONTRACTION

The unconscious-mental category of causes of contraction includes every unconscious memory which clashes with the subject's personal code of life harmony and tends to establish a permanent condition of mental stare, nervous tension and muscular contraction.

This condition is proportional to the sum of the discrepancies registered between the subject's experiences or their recall and his personal code of life harmony, and its eradication can be secured only by dealing with this sum of discrepancies.

Before this can be achieved by the application of the law of converse thought, every one of the subject's baneful memories must be made to emerge into consciousness, which is impossible. The most painstaking investigator can at best hope to reawaken only a minor proportion of those baneful memories, and to them he may apply the law of converse thought. Other methods are required for the removal of unconscious-mental causes of contraction.

Conditions can be eliminated by action capable of either removing or destroying their cause, or of neutralizing its effect.

Where a blue vase clashes with the colour scheme of a room of distinct green, this effect can be eliminated either by the removal of the vase from the room, or by so surrounding or treating it with yellow, that the compound result shall yield a green in better tone with the room.

It is not within the power of the subject suffering from mental and nervous tension and muscular contraction, due to unconscious-mental causes (he being by definition unconscious of its cause) either to remove or destroy it, and he must needs limit his action to attempts at neutralizing its effect.

Although he is unconscious of the actual cause of his condition, by definition this is of the category of mental activity, albeit unconscious, and attempts to neutralize its effect must be confined to mental activity.

The negative process of removing that which is wrong must be held insufficient; and conditions favourable to sound subjective activity must replace those inimical to it.

Before this can be done, the subject must know what are the effects of unconscious-mental causes of contraction he intends to overcome.

These effects are threefold: sub-conscious concentration on the disturbing memories, leading to excessive concentration of energy in the brain, and wasteful consumption of it; inhibition of circulation of energy through the rest of the system, and its useless expenditure in muscular contraction; and inhibition of blood circulation.

Any action having for its object the neutralization of these effects must be capable of breaking the excessive concentration and expenditure of energy in the brain, of fostering its free distribution through the whole of the nervous system, and of improving circulation.

The following laws govern the liberation of energy in the brain, its distribution through the system, and its expenditure in or by it:

(1) Energy is liberated in and distributed from the brain to any part of the system, for any work, by thought, conscious or unconscious.

(2) The amount of energy liberated and distributed for any work is governed by:
   (*a*) The amount of energy available,
   (*b*) The amount of energy assumed to be required for the performance of that particular work, and not by the amount of energy actually required.

(3) Energy once liberated cannot be recalled, but must be wholly expended, either in or by the system.

(4) The concentration of thought on any part of the system involves distribution of energy to that part, in proportion to the amount available and to the strength of the thought, and this energy must be wholly expended either in or by the part concerned.

If exception be made of cases of liberation of energy in the brain, occasioned by purely mechanical changes, law (1) will be accepted as giving expression to the mode of function of the normal being preparatory to action.

Illustration will clarify the remaining Laws.

The following will be taken to illustrate laws (2) and (3), and will enable us to form practical conclusions.

If a subject be asked to raise a suit case from the ground, and to deposit it on a table three feet high, and implicitly accepts the information that the suit case is full of books and weighs exactly one hundred pounds, whereas it is empty and only weighs ten pounds, he must liberate an amount of energy suited to the performance he assumes to be asked of him, and distribute that energy through his system according to the local requirements of each limb and muscle, as indicated to him by experience.

Let us assume the energy he considers himself called upon to liberate, to be three hundred foot pounds. Although the energy actually required only amounts to thirty foot pounds, he nevertheless liberates three hundred foot pounds.

As the raising of the ten pounds suit case to a height of three feet, cannot consume three hundred foot pounds of energy, he finds an outlet for the excess of energy liberated, in the raising of the suit case at a greater velocity and to a greater height than at first intended. If these two outlets are insufficient to consume the whole of the excess liberated, he finds a fresh outlet in the raising of new weight, which he can only find in his own body.

He overbalances to an extent sufficient to satisfy the law, that energy distributed cannot be recalled, but must be wholly expended in the general direction originally indicated by thought.

Having lost his balance, he is called upon to liberate new energy sufficient to recover it, and eventually to place the suit case where he originally intended it to rest. This involves him in the additonal expenditure of, say, one hundred foot pounds of energy.

The total expenditure involved in ultimately placing the suit case on the table, amounts to four hundred foot pounds, instead of only thirty!

This waste is due exclusively to the subject's faulty assumption that the suit case weighs one hundred pounds instead of ten. Faulty estimate of energy-cost has involved him in expenditure more than twelve hundred per cent above true requirements.

Let us assume that all the subject has learned from his experience is that the raising of the suit case three feet only involves the expenditure of thirty foot pounds. Let the suit case be filled with books and its weight brought to one hundred pounds (unknown to him), and let him be asked to repeat his action.

He approaches the suit case with the experience just gained, and liberates exactly thirty foot pounds of energy. As this is insufficient to raise the increased weight, the suit case remains unmoved, and the thirty foot pounds of energy are wasted.

Consideration of the new problem then teaches him that more energy is required, and he attacks the work afresh, ready to provide energy in increasing quantities, until such time as the suit case be raised to the table.

The total expenditure involved in ultimately placing the suit case on the table amounts at the most to three hundred and thirty foot pounds instead of three hundred.

This relatively trifling waste is due exclusively to the subject's faulty assumption that the suit case weighs ten pounds, instead of one hundred, and that therefore, to raise it three feet, the required expenditure amounts to only thirty foot pounds instead of three hundred. Faulty estimate of energy-cost has involved a waste of ten per cent above requirements.

In the first case, over estimate of the expenditure called for has involved waste of energy amounting to more than twelve hundred per cent. In the second case, under estimate of the expenditure called for, has only involved waste of energy amounting to ten per cent. The waste incurred in the first case is, therefore, more than one hundred and twenty times greater, relatively, than that incurred in the second.

As far as objective work is concerned, the moral is that since the expenditure of energy on work is governed not by

actualities, but by mental estimates, over estimate of cost (or its equivalent, under estimate, by the subject, of his own capacity) is to be avoided as ruinously expensive, and under estimate of cost (or its equivalent, over estimate, by the subject, of his own capacity), though far from ideal, is very much less dangerous, as it can only involve the subject in relatively negligible waste.

The conclusion is justified that nervous and mental collapses are hardly ever brought about by actual overwork, but rather by excessive expenditure of energy in connection with work, due to faulty estimate of cost. Life shows that it is not the successful statesman or man of affairs, working for long years at the rate of sixteen or more hours a day, whose nervous system breaks down, but rather the man to whom the least enterprise seems fraught with overwhelming difficulties, and who never seems to have time for anything.

Disproportionate expenditure is wholly due to a faulty mental attitude, compound of over or under estimate of energy-cost, and under or over estimate of personal capacity.

The counsel of perfection is: 'Know yourself, know your work.' That is—know yourself for what you really are, know how you work, know how much you are capable of, your strong points and weaknesses, know the state of your balance in the bank of energy; know your work for what it really is, know how much each undertaking should cost in energy, know how to form your estimates of energy-cost accurately, take groundless fears out of all enterprises, pay due respect even to minor deeds.

Such counsels of perfection are, however, of little value to all but the most evolved individuals, and the soundest general guidance is to be found in optimism, cheerfulness, the words 'I can,' and in the application of the law of converse thought to the contemplation of all work which appears overwhelming and awe inspiring.

Care should be taken to avoid all extremes, for in no field could one more aptly apply the old tags: 'the happy mean'—'the middle way'—'in medio virtus.'

The morals and conclusions enunciated above as applicable to objective work, apply with equal force to subjective

work, and with reference to laws (2) and (3) in relation to subjective work, the following will enable us to form practical conclusions.

It has been established, both in human beings and in animals, that salivary and gastric secretions respond to external stimuli registered by whatever sense.

These responses vary, in nature and degree, with the nature of the external stimulus and the strength of the sensory impression produced.

It has been shown under vivisection (more humane methods would have yielded equally conclusive results) that the gastric secretions of a dog varied instantaneously and appropriately, as different foods were presented to its eyes or nose.

It is accepted that the memory of different foods is capable of stimulating secretions proportional to the perception recalled, be the form taken by such ideation that of sight, smell or taste perception.

This in itself is sufficient to demonstrate that laws (2) and (3) apply to subjective and objective functions. The expenditure of energy involved in the performance of subjective work is governed not by actualities, but by mental estimates, consciously or unconsciously formulated, and energy once liberated cannot be recalled, since the secretion occasioned by an early thought cannot be altered by a later one, but only supplemented by it.

The following makes clear the part played by mental estimates of energy-cost in all collapses of subjective functions.

If a subject has for some reason, valid or futile, formed the opinion that tomatoes are indigestible—that is, if he has formulated a high energy-cost estimate for the subjective work involved in digesting tomatoes—energy will be expended in proportion to that estimate, whether tomatoes are or are not indigestible to him and whether he eats them or thinks of doing so.

What is more, he will still expend the amount of energy he estimates to be necessary if, unknown to him, every single tomato on his plate is stuffed with food considered by him to be easily digested. As a result, he will suffer from

indigestion as the effect of eating digestible food, for the simple reason that he will have expended energy out of all proportion to his requirements, and stimulated the secretion of salivary and gastric juices totally unsuitable both in nature and quantity.

The conclusion is that as with objective work, so with subjective work, functional and organic collapses are hardly ever brought about by over-work, but merely by excessive expenditure of energy in connection with work, or expenditure badly directed as the result of faulty estimates. It is not the man who eats well and cheerfully, without worrying about his food, who suffers from dyspepsia; but rather the man to whom the digestion of the lightest meal seems to be an overwhelming problem, and who hardly ever dares to run through a menu without denying himself this or that perfectly harmless course—'because it does not like him.'

The counsel of perfection, from the point of view of functional efficiency, as well as that of nervous economy and solvency, is, 'Know yourself, know your work,' that is, learn to form your estimates of energy-cost accurately, basing them on sound knowledge of what you are capable of, and what you are asking your system to do. And once again it will be found that the most helpful advice lies in optimism, cheerfulness, the words 'I can'.

In all thought preparatory to action, two distinct processes are observable, the first, involving a command that certain work shall be done; the second, involving a command that so much energy shall be liberated and delivered to limb and organ for the performance of that work.

These two processes can be likened to the legislative and executive powers, but need not necessarily be found in association.

It is possible to set one process in motion, and to liberate energy, release it, and distribute it to any limb or organ, without any reference to the other, that is without giving any instructions for the expenditure of that energy on any particular work.

Such liberation of energy and its distribution to organ or limb follows concentration on any part of the system with-

out any thought of the particular part being called upon to perform any work, either subjective or objective; and recognition of this fact is embodied in law (4).

When a little girl is told she is pretty, ugly, the best little girl in the class, an unconscionable little liar, she blushes.

The only common factor in these different thoughts, is that the little girl is made to concentrate on her face by self consciousness, and thereby to liberate energy, and distribute it to her face, without any direction for its expenditure on objective work; with the result that in conformity with law (3), the sum total of this energy is expended in increased circulation.

When the same little girl is told that she cannot have washed her hands for several days, she may indulge in an incidental facial blush, as she becomes face conscious, but being made to concentrate on her hands, she will liberate energy and distribute it to her hands, without any direction for its expenditure by them, with the result that in conformity with law (3), the sum total of this energy is expended *in* the hands, either in subjective work, increased warmth and circulation, or *by* the hands in movement, the aimlessness of the movements of a hand-conscious child making clear the fact that the executive process has been set in motion without any reference to the legislative process.

Tell her she has beautiful ankles, she may once more indulge in an incidental facial blush, but being made to concentrate on her ankles, she distributes energy to them, without any direction for its expenditure by them if she is merely shy, but with the most definite directions for its expenditure by them, in movements advantageous to their artistic display, if she is a self-satisfied little imp; with the result that in conformity with law (3), the sum total of this energy is expended either in increased circulation or in objective work by the legs and feet, this once more making it clear that the thought processes liberating energy, and those controlling its expenditure, are distinct and separate.

Concentration is to be recommended in connection with any part that happens to be weak, bloodless or injured, as it tends to promote metabolic activity, provided it is not

vitiated by a harmful negative thought which only results in expenditure of the energy in nervous tension and muscular contraction.

It is in this process of concentration on different parts of the body that is to be found the meaning and purpose of the phenomenon of pain. Pain arises where disorder calls for the expenditure of energy on work of repair in excess of the amount normally spent on healthy tissues. Nature wisely provides that the requisite concentration of the mind on the ailing tissues, shall be exacted from the subject by sending to the mind the special calls for attention and help embodied in the sense of pain.

Where there is partial or complete loss of feeling, repair processes are considerably retarded, if not completely interrupted.

Except when pain is so intense that the bearing of it is more than should be asked of the subject, nothing could be more fatal to the ultimate removal of its cause than the premature elimination of the pain itself. It may be a perfectly simple matter to remove, say, an attack of spasmodic headache by the administration of drugs, but this removal of the pain, far from contributing to the removal of its cause, tends to deprive the centre responsible for distribution of the very information it depends on for the sound performance of its function as distributor. It merely relieves the subject of the unpleasant knowledge that work of repair is needed, and from the point of view of efficiency, it is on a par with the conception that out of good feeling for the fire brigade, the telephone operators ought to disconnect their apparatus whenever a fire is reported. Like that conception, it tends to the ultimate aggravation of the conflagration which is the fundamental cause of the call of 'Fire' and of the message of 'Pain'.

Needless to say, these remarks do not apply when the drug employed is intended to deal with the cause of the pain itself; but even in that case, the administration of drugs, and with it the use of any assistance extraneous to the subject, involve the performance on behalf of the subject of certain work that should be undertaken by the subject himself in response to the message of pain, and reduce the

subject's capacity and inclination for that work, whenever nature again calls for it.

Conclusions remain to be drawn as to the manner in which the laws can best be applied in order to eliminate from the system before sleep the effect of the fourth category of causes of contraction: unconscious-mental causes.

Thought must be given to each part of the body in turn, so that each part shall receive the energy required by it during sleep.

Since the energy so distributed must be expended exclusively on subjective work, only one of the two thought processes preliminary to objective action must be brought into play, the process promoting liberation and distribution, that providing for objective expenditure being carefully avoided. Thought must be of a contemplative nature.

Concentration of the mind on different parts of the body should follow the course of the nervous system, and the mind should be allowed to rest on each part in succession, for a certain length of time.

The routine should take the following lines: after performing the three exercises described on pages 73 and 82, the subject passes on to:

(4) Distribute energy by thought, from the brain to all parts of the body in turn. Do so without any effort to make anything happen, without even forming the wish that anything should happen, merely observing the effect of thought. Give long enough time to each part to elicit some response, and adopt the following order:

(*a*) Head: Think of the brains, the scalp and forehead, the eyes, the nose, the ears, the cheeks and cheek-bones, the jaw muscles and jaw bones, the tongue, the lips and chin.

(*b*) Spine: Think of the base of the brain, follow the spine down the neck, between the shoulders and ribs, through the waist and continue until you reach the last vertebra.

(*c*) Back: Think of the back muscles of the neck, shoulders and shoulder blades, ribs, waist and hips.

(*d*) Front: Think of the side and front muscles of the chest, the side muscles of the waist, the muscles of

the pit of the stomach, the muscles of the abdominal wall.

(*e*) Functions: Think of the nose and breathing, the tongue from root to tip, the gums and teeth, the roof of the mouth, saliva and the mouth watering, the swallow, the inside of the neck, the lungs, loose and open to circulation, breathing freely, the inside of the pit of the stomach, the region of the solar plexus, the whole of the inside of the abdominal regions, loose and open to circulation, heaving freely.

(*f*) Arms: Think of the shoulders and shoulder joints and muscles, the muscles between the shoulders and the elbows, the elbows, the fore-arm muscles, the wrists, the palms of the hands, the backs of the hands, the knuckles, the finger joints, the nails, the finger tips.

(*g*) Legs: Think of the hip joints and hip muscles, the thigh muscles, fronts and back, the knee caps, the knee joints, the backs of the knees, the shins down to the ankles, the calves and tendons of Achilles down to the heels, the ankles, the heels, the insteps, the balls of the feet, the toes down to the nails, the soles of the feet.

This distributes through the whole system the energy needed for work during rest.

It neutralizes Unconscious-mental causes of contraction.

Make sure as you think of each part that you are not unconsciously contracting it.

This mental exercise may seem tedious at first, in the early days it may take half an hour, but with practice a few minutes, and eventually a few seconds, will secure perceptibly improved circulation over the whole system and a general sense of glow and well-being.

At the beginning, sleep may supervene before the exercise is completed, but this is a passing phase which perseverance overcomes.

The aim is the widening of the field of consciousness, the rendering conscious of the unconscious.

From careful observation, the subject will learn how every thought, however trifling, acts on his subjective self

for weal or woe. He will learn how to adjust thought to his needs, how to control it for his advancement, how to master conscious evolution. As he gradually increases his consciousness of the being within himself, he will be blessed, in time, with the realization that the echo of the Infinity of thought and energy and substance involved in him is daily gaining in power, in volume, and in clearness.

Chapter 8

CONTEMPLATION OF FUNCTION PERFORMANCE

The practices so far described foster the conscious use of instinct as a preventive and creative force. The mere possession of energy does not guarantee its sound expenditure, any more than the possession of money secures that it shall be wisely spent.

The wise use of money presupposes the habit of handling it. A man who has spent years in penury, generally squanders an unexpected fortune, and eventually finds himself worse off than before his windfall, shorn of the frugal habits born of need, and burdened with new tastes he can no longer satisfy. The wise use of energy presupposes a fairly long established habit of handling it. A subject whose health has failed through the lack, or faulty use, of energy, and who then becomes possessed of a considerable amount of it, will not necessarily expend this new found wealth to his best advantage. Probably he will merely continue to indulge in his faulty sub-conscious habits, with the result that he will only have added to his capacity for harming himself.

Take two mental cases, both suffering from suicidal tendencies. One is nervously and muscularly strong, full of energy, a constant danger to himself. Steps are therefore taken to deprive him of any means of injuring himself. The other is so weak that he is confined to bed, unable as he is to raise even a hand. If he be provided with new energy sufficient to enable him to get up, this additional power will not necessarily be accompanied by a change in his intentions to use energy for his own destruction.

If it were within the power of anyone so to add to the capacity of the mentally deficient for expenditure of energy on objective work, it would be criminal to do so, unless he

could at the same time proportionately improve their capacity and inclination for its wiser expenditure.

Disorderly function occurs as a result of what may be termed 'insane' use of energy by the unconscious mind, from which it follows that order can only be restored by appropriate action in the unconscious mind, and the problem arises: How is the unconscious mind to be induced to expend energy so as to secure specific advantages?

Subjective functions are merely means to an end. They aim solely at the maintenance, improvement, development and evolution of a system capable of performing objective functions.

The word 'fit' always connotes 'fitness for' the performance of some objective function, 'fit to fight for my life'—'fit for bed'—; and the absence of fitness always connotes incapacity to perform certain functions, 'not fit for anything'—'not fit to walk a yard'—or, 'fit to give up the ghost'. Fitness is relative to a function. It never evokes the contemplation of an individual in a static condition; it always brings to mind a kinetic condition, a performance.

There is truth in the saying: 'He who wants the end, wants the means,'—that is, he who keeps the end in mind, keeps the means in mind 'as means' to the particular end. If you want to get anything done, you must provide the means, and think of and use them only because of their capacity to produce the end. There is truth also, in the converse: 'He who wants the means, wants the end,'—that is, he who busies himself with the means to an end, can only do so because he keeps the end in view.

No one in his senses busies himself with the provision of means to no end. The loss of consciousness of the end of any action interrupts that action, and the question arises, 'Why am I doing this?' Work is not resumed until the mind is again conscious of its object, or a new motive has been discovered.

Sanity and mental capacity are in direct proportion to purposefulness, insanity and incapacity to the unfitness of the means selected to the end in view.

The means to obtain function-capacity lie in thinking in terms of function performance. The belief is commonly held

that the exercise of a definite function or faculty is responsible for its development, but the popularity of this belief is no guarantee of its soundness.

It is generally accepted that running is responsible for the development of the runner's muscles, deep breathing for the development of a large and powerful chest. This merely represents a half truth. The capacity for any activity could never be exercised were it not for the fact that mental contemplation by the subject of himself in the act of performance invariably precedes the exercise of the latent capacity.

Since objective function can never occur unless it be preceded by the conscious and unconscious mental processes required to move the system to action, the ultimate cause of any development, apparently resulting from exercise, lies in the processes of will and imagination preceding performance.

If it were true that running is alone responsible for the development of the runner's muscles, it would also be true that the longer the run indulged in, the more powerful would be their development. It could then be asserted that fatigue is a mere fancy, and that no better preparation for a win in a hundred yards' race could be thought of, than several such races immediately before the event.

Exercise alone does not account for the development of its instrument. Running and deep breathing alone do not account for the development of leg and chest muscles.

The statement that exercise fatigues and burns muscle seems a platitude; but forgetfulness of commonsense and obvious truths fosters a good deal of popular error.

Some activity other than exercise must be responsible for the organ or muscle development attributed to exercise alone.

What is this particular activity? What are the laws that govern its performance? Is exercise the only or the most efficient means of promoting it?

The chain of activities that leads to the development of, let us say the leg muscles following on exercise, is as follows:

(1) The subject decides to run.

(2) According to the type of run intended, the mind

regulates distribution of energy in proportions based on experience, consciously for the expenditure involved in the act of running itself, subconsciously for the expenditure involved in the increased organ activity necessary for a run.

(3) Running begins: that is, the word of command is given that promotes the expenditure of energy distributed, on the lines previously contemplated. Running continues as long as the mind so ordains, at the rate prescribed by it, within the limits of the energy available. Beyond a given point, this exhausts muscle more than it develops it.

(4) Then follows a period of rest during which work of recuperation and development is carried out.

(*a*) The exact amount of work performed during that period is governed by the amount of energy available, and distributed.

(*b*) The amount of work performed in individual muscles or organs, is governed by the amount of consciousness of them and attention to them that is exacted from the unconscious mind, i.e., a sore muscle exacts more attention than a free muscle, and as a result, has more energy expended on it; pain stimulates local activity, numbness reduces it.

(*c*) The nature of the work performed in individual muscles or organs is governed by the nature of the conception formed by the mind of the particular functions for which it is intended that the muscle or organ concerned shall develop capacity. A subject whose conception of all that is involved in speedy running is clear and well-defined, evolves a better running machine than one whose ideas on the point are vague.

If the aim of a subject be to develop a system adapted to speedy running, the chain of activities leading to the evolution of such a system can be altered so as to emphasize the all-important fourth link, considerably to reduce the less important third link, and in some cases even, completely to short-circuit it.

What matters in the evolution of muscles and organs is

the nature and quality of the subject's action on his unconscious mind before and during periods of rest. This is more important from the point of view of development than actual physical exertion. The mental contemplation by the subject of himself in the act of imagined strenuous running, indulged in for some time before or during periods of rest, sets in action all the unconscious processes that conduce to muscular development (fourth link), irrespective of the fact that actual running has or has not taken place.

The work initiated by such a form of mental training will be more efficient than unconscious work initiated as a result of actual exertion, inasmuch as it will be undertaken with an organism that will not have been previously subjected to the expenditure of energy involved in actual running, and will therefore have at its disposal a considerably larger supply of that energy.

It is not suggested that this mental training should be used to the neglect of the actual performance of the function itself, but rather that it should be regularly used in addition to actual performance.

Development follows quality of thought: the thought of running fast tends to develop the capacity for speed, the thought of slower and sustained running that for marathon contests. A well-defined vivid image of fast running is more efficient in promoting the development of speed than one less well defined.

The function of an architect is to design houses, factories, buildings of all kinds—that is, to evolve manifestations that shall fulfil definite objects. How does the architect proceed when he wishes to produce a certain building? He thinks in terms of performance of function—'What is the particular building I am evolving intended for? What is it to do? Is it to be lived in, worked in? Is it to be used as a restaurant, a school, a museum, a barracks? Of whatever type, is it to be a small, a big, a costly, an inexpensive example?'

He conjures up the picture of this instrument performing its function, being lived in, worked in. He sees the guests trooping into the restaurant, eating, the staff serving, the restaurant fulfilling its function. He sees the school, the masters, the pupils, the classes at work. He does the same,

for museum, barracks, and zoological buildings. And behold! from his inner consciousness—from the store in which every single building he will ever produce lies dormant, potentially complete—from the mental contemplation of his instrument fully evolved, ideally performing its function, the means to the end emerge, fit for their work. The architect can then put pencil to paper; but not a second earlier.

But the function of a building rests in the province of statics. A building actually does nothing. Its function is to be used by certain beings, men or animals, big or small, many or few. According as the architect sees men or animals, big or small, many or few, rich or poor, using his building, the answer produced from his inner consciousness adapts itself to his changing conception.

No great building was ever produced by the contemplation of the performance of a small function. Every great building ever produced has owed its being to the creative contemplation of the performance of a great function.

Always there exists proportion between the performance contemplated and the building evolved.

Similar to the evolution of a building, in terms of its static functions, is that of a motor car the function of which is kinetic.

The object of a motor car designer is to evolve cars that will perform definite functions. He thinks in terms of performance of function. He conjures up the picture of his instrument being driven, travelling, racing, carrying goods, passengers, much, little. And from his mental contemplation of his instrument ideally performing its function, the means to the end emerge, fit for their work. The motor car designer can then put pencil to paper, but not a second earlier.

But the function of the car rests exclusively in the provinces of statics and kinetics. It actually does nothing by, or of, itself. Its function is to be used, by certain intelligent beings, men, big or small, many or few. As the car designer sees men, big or small, many or few, rich or poor, using his car, the answer produced from his inner consciousness adapts itself to his changing conception.

No car was ever produced without this creative contem-

plation of function performance. Every car ever produced has owed its being to it. No fast car was ever produced by the contemplation of low performance.

Always there exists proportion between the performance contemplated and the car evolved.

And because of that, car designers must dream of the best and the most powerful cars, performing the highest function to perfection, before such cars can be born of their pencils and papers. They must so continue, well knowing that at times manifestation will fall short of conception, the instrument will be poorer than its imagined prototype; well knowing too, that only the contemplation of the highest function-performance can ever promote the evolution of the instrument that will perform that function.

If we pass from the contemplation of a car that cannot of its own accord do anything, start itself, steer itself, run itself, repair itself, make itself, that cannot even have the least influence on any of these functions, to the contemplation of man, who can reproduce his kind, develop, control, change himself, who has the preponderating influence on all these functions, we shall find that identical laws hold good.

The function of man is to evolve the individual who will perform efficiently the functions expected of him in his environment.

How does he proceed to make of himself a man capable of performing a definite function? He thinks in terms of performance. What am I to do in life? What am I to be capable of, fit for? The youth conjures up the picture of his evolved instrument, performing his function, living, working, writing, painting, making houses, cars, boots, ruling nations, ruling men, ruling himself with an iron hand, an unbending will, doing great things, fighting great wrongs, making big causes and winning through—in short, doing a man's work, according to his lights. He does this for a small or a big future, for a great or a puny life, for a noble or an ignoble end. And behold! from his inner consciousness, from the mental contemplation of his instrument fully evolved, ideally performing its function, the means to the end emerge, fit for their work. Then, the man designer can direct his evolution; but not a second earlier.

Yet the functions of a man do not rest exclusively in the provinces of statics and kinetics. They far exceed those two fields of the inanimate. Continued life being indispensable to working evolution, he endeavours to continue in the possession of personal life, and in proportion as he fails to maintain his hold on it he endeavours to fulfil by reproduction his primary duty, the trusteeship of life.

His function is to evolve, in thousands of kinds of men, men strong in body or strong in mind, men of science, men of arts and letters, men of business, men of action and men of dreams. According as man, the man designer and man maker, according as youth, the father of man, sees strength of body and of mind, science, arts, letters, or business, action or dreams, and sees all these things in terms of function-performance, the answer from the builder within adapts itself to his changing conception.

And here we speak of the real man, not the man others think him; internals, not externals, character and temper, the nature of the blade, not what it can and cannot carve, not whether it meets with blades of poorer steel or foes that cannot yield, not failure or success in the eyes of the world. All these are relatives. But whether it succeeds or fails against itself, whether it gets hold of itself, and day by day makes its own steel of better temper, or softens and disintegrates. Whether, to change the metaphor, the man, marking milestones alone within himself, can see that on and in himself, he gains and keeps on gaining ground, in soul, mind, nerve, and body, or that he is slipping back and keeps on slipping back. These are the things for which man is responsible.

No great man was ever evolved without creative contemplation of himself performing the function of the great man he had determined to become. Every great man ever produced has owed his evolution to this prophetic vision of himself in action.

Always there exists proportion between the performance contemplated and the man evolved. This is true within the limits of the power available. All the great men contemplated, in action, in the minds of youthful man makers, have not become the men intended, all conceptions of greatness

have not led to adequate achievement, nor all clearly defined intentions, to equally defined executions. Something was lacking—drive, life force, energy, spirit.

This is true, not only objectively, but subjectively. All the healthy men contemplated in active healthy function in the minds of man makers, have not become the men intended; all conceptions of fitness for a function have not led to the fitness contemplated. That same 'something' was lacking—energy, nerve, the dynamic power with which the evolving organism could respond to the creative impulse.

If all creative thought does not of necessity reproduce its mental prototype, if all the great conceptions of youth do not evolve great men, if all athletic fancies do not make bodies that break records, it is true also that all eminent men, whatever their fields, have owed their evolution to the fearless prophetic contemplation of actual achievement which alone makes the man.

If you want to do, start by dreaming of doing; well knowing that at times development will fall short of conception, the instrument be poorer than its prototype; but knowing too, that only by the contemplation of the highest function-performance can the greatest performer be evolved.

If this is false, one of two alternatives must be true. Either, the child who will one day be the great captain dreams of winning his fairy battles, because one day he will be the great captain; that is, effect precedes cause, or, the youth who thinks of nothing but engines and steam, will ultimately become a painter of landscape or a merchant of perfumes; that is, there is no such thing as cause and effect, there is no relationship between the end and the means.

Know what you want to be; make sure it is worth being, and then, before sleep or rest, contemplate yourself performing the function of the man you want to become in the most perfect possible manner. The more vivid and the clearer the thought, the more the energy available: the better the effect.

Chapter 9

CONTEMPLATION OF SENSORY FUNCTION

As contemplation of motor performance fosters both the distribution of energy to organs and limbs, and their evolution, so contemplation of sensory activity assists the evolution of the senses.

Not only is it beneficial to the senses, but just as motor contemplation propels energy from the nervous centres to the periphery, with attendant radiation into the surrounding ether, so does sensory contemplation promote the drawing-in of energy from the ether by the nervous system.

In the attempt to substantiate this statement, the words sensory activity refer to the five senses, but this should not lead the reader to assume that principles of contemplation applicable to the five senses apply only to these. Rather is it suggested that any further senses latent in man, will only reach full development through mental contemplation of their potential exercise.

Sensory function is dual: it involves an instrument of registration, and a nervous connection between the instrument and the seat of consciousness. The retina registers a picture by bio-photography, and the optic nerve conveys the resulting message to the appropriate brain centre by bio-electricity. The instruments of the sense of touch perform their function of registration, and the resulting message is conveyed to the brain by bio-electricity.

The efficiency of a sense is dependent upon that of both its mechanical and bio-electrical portions. Blindness may be caused by an eye or by a nerve defect; deafness, by an ear or nerve defect.

The incapacity of one part of the sensory equipment, such as the retina or the optic nerve, does not of necessity entail the incapacity of the other. The optic nerve may be severed,

but the retina may still receive photographic imprints; the retina may be obscured by an opaque lens, but the optic nerve may continue to convey the bio-electric current inwards from the eye to the brain, although this current will no longer carry any message, no impression having been registered by the retina.

That the retina may react to light independently of the efficiency of the optic nerve is not in dispute. That the optic nerve is capable of conveying energy from the objective world to the subjective brain centre, independently of the efficiency of the retina, has not, so far, been established, but can be demonstrated experimentally.

Before describing experiments (concerned with vision), and pointing out their moral, before suggesting that this moral applies to the other senses, an attempt will be made to expound and justify the theory they are intended to support.

When an individual is born, he is equipped for the purposes of what we call life, with two things: an instrument, the body, in all its wonderful complexities, and a certain amount of energy, force, life (the name hardly matters, the thought does), with which to operate this instrument.

From the examination of an infant's body, of his instrument of life, an estimate of his chances of life can be made; 'this child cannot live an hour,' or 'this is a fine child. He ought to make a fine man and live to a ripe old age.'

For such estimates, guidance is available only in the shape of physical signs of physiological efficiency. They are based exclusively on how the body, the instrument, looks, feels, and appears to function. The questions the estimator asks himself, are: 'Is this instrument designed and constructed on such lines, that provided driving force—energy—is available, it can function and continue to function?' and 'Given its structural condition, does it function efficiently?' The only way in which the estimator can answer such questions as these, is: 'This instrument is or is not designed on such lines, that provided the driving force—life energy—is available, it can function and continue to function,' and 'It does or does not function efficiently.'

About the questions: 'How much driving force is available?' 'How long will the present available store last at the present rate of expenditure?' he can say nothing definite, for the simple reason that he has no means of finding out what the present available store amounts to, or at what rate it is being expended and replenished. All he can say is: 'Generally speaking, when an instrument is constructed as this one is, and functions as this one does, the replenishment of energy supply keeps pace with the consumption for an x number of years.' The little he can say is of doubtful reliability, since his premises include an unknown quantity.

A motor-car salesman may be able to satisfy an intending purchaser that the car he is shown is designed on thoroughly sound principles, constructed out of first-class materials, and beautifully machined; that it ought to function satisfactorily for an indefinite number of years, provided there is petrol in the tank. He may take him for a drive and show him that the car functions efficiently, but he cannot give him any information about the exact number of miles the car will run before coming to a dead stop (irrespective of physical damage or defect), unless he knows two things with absolute certainty; firstly, how much petrol there is in the tank, and secondly, how much petrol the car consumes per mile.

With the human body, in estimating an individual's tenure of life, it is this factor that matters. How much is there in stock? How much life is consumed per day? Does the individual replenish his supply at a rate equal to that of his consumption? Does he acquire life as efficiently as he expends it?

In some ways, life works and is made and spent like money. A millionaire will be able to live on capital at a certain rate, almost indefinitely. A poor man who would live on capital, could only do so on a very modest scale, or for a very short time.

The same applies to life's capital. There are weak bodies with apparently inexhaustible funds of life-energy, truly millionaires of life, whose weak instruments cannot consume the fullness of their fire. And there are bodies, strong in structure, organically and physiologically sound, yet,

apparently devoid of driving force, mere inanimate flesh, that do nothing (or nothing worth doing), and can do nothing, either because they lack the wherewithal (there is no life in stock, or too little of it), or because maintaining the mere functions of life, renewing flesh and frame, consumes all the life they have.

The man with a big income can afford a high rate of expenditure, the man who makes little must look to every penny he spends. The man who makes a lot of life, who absorbs constantly large quantities of life-energy, can afford to live vigorously, can do much. The man who absorbs little or no life, must be very guarded in his expenditure of it.

The thing that matters most about both life and money is, that to have any meaning at all, they must circulate. We must live to have life and life value. We must make and spend money, keep it going round, to get anything out of it. No hoarding of either has ever led to the fullness of either.

We must realize that precisely as money is a thing outside us, of which we can make no use unless we make ourselves into vehicles for its conveyance, unless we keep it, as it were, circulating through us, constantly in and out, so is life-energy, a thing outside us, a force of which we hold only a small portion at any given time, of which we can make no use unless we make ourselves into vehicles for its conveyance, unless we keep it, as it were, circulating through us, constantly in and out.

What is life, full life, but intense circulation of energy through the nervous system, up the sensory and afferent nerves, from the objective world, to the brain, and down the motor and efferent nerves, from the brain, to the objective world?

What we call life, is only the manifestation of the passage of life-energy through our nervous system.

Life itself, the real thing, not its manifestations, is all around us, a force which suffuses all things, all space. In this force, we move, in it we have our being, and it is only by our displacement in it, or its displacement through us, that we manifest it. The more of it we take in, the more we can give, the more we can live. The more of it we give, the

more we can receive, the more we can live. In the understanding of that thought, is to be found the understanding of this other; that 'He that loseth his life . . . shall find it.' Not he who dies thereby finds life (for that could almost be read as a recommendation to throw away life at the earliest opportunity, for the sake of securing the other life), but he who giveth his life force, his nervous energy, only stimulates the circulation of it, through his nervous system, and makes possible by its more rapid outflow a more rapid inflow. By emptying himself, he makes it possible for him to be filled again.

Our aim must be the conscious enjoyment of the fullness of Life, of the fact that life-energy is circulating through the whole of our nervous system in the greatest abundance, at the highest rate, with the highest efficiency possible. Abundance, rate, and efficiency of circulation are, all three, subject to constant change, to improvement or deterioration. The object of life must be the ever-increasing consciousness of the flow of life-energy into and out of our nervous system.

This consciousness must not be illusory, it must give us a true measure of an actual improvement in the efficiency of the flow of life-energy into and out of us.

All nervous activity (be its effect muscular contraction, or registration of perception, or the mere mental contemplation of those activities) involves a displacement of life-energy, either outwards from the nervous system to the surrounding ether, or inwards from the surrounding ether.

Contemplation of motor activity definitely increases the consciousness of circulation of energy, but its persistent use would lead to exhaustion, unless the supply were maintained by contemplation of sensory activity.

The thought that mere mental contemplation of sensory activity leads to an inflow of life-energy from the surrounding ether into the nervous system, may appear absurd.

Its experimental demonstration requires two or more participants possessed of the following qualities: clear heads, open minds, a capacity for accurate sensory appreciation, and an imagination not too easily influenced by suggestion.

The purpose of the experiment is to prove that the

thought of seeing results in energy being absorbed by the nervous system from the surrounding ether.

Seeing involves two types of work: the retina takes a photographic film, the optic nerve carries an energy-current inwards, by means of which the message that a definite picture has been taken by the retina is conveyed to the centres of vision in the brain.

If we are normal, our temperature is 98.4°. If I press my lips to your hand, you register a new sensation, but the new sensation is not new in connection with temperature, but only in connection with touch. If I blow on your hand whilst holding my lips pressed on it, again a new sensation is experienced, but not a sensation of additional heat. My breath is 98.4°, your hand is 98.4°.

But if I blow on your hand through a folded handkerchief, there is again a new sensation, not only of touch in this case, but of additional heat as well. My breath may seem to you to have risen considerably in temperature. Pressure, friction, etc., have introduced entirely new factors and liberated additional heat.

Suction, a partial vacuum, would produce the opposite effect; you would feel cooler.

When the eyes look at anything, the retina takes its film, and in order that the optic nerve shall be provided with energy with which to convey the message of the retina to the brain, the eye extracts energy from the ether along the whole of its focal beam, and from the object looked at. The eye 'sucks' energy from the object it looks at, it generates a condition of partial vacuum on the surface of the object. If the point on which the eyes are focussed is sentient, is capable of registering heat and cold, it should register cold. If that be so, the eyes behave very much like the search-lights of a motor car, but instead of throwing a beam of light on to the object, they take a beam of energy from it.

That sounds very interesting. But it is only a theory. An ounce of good theory is worth pounds of any practice. Sound theory satisfies the mind through the intelligence, our highest instrument. Pounds of the best practice, can only satisfy the mind through the senses, the lowest and

most easily deceived of all our instruments, the jokes conjurers live on, the implements we share with all animals.

Since most of us only reach conviction through the senses, and when our minds say: 'this is so,' reply: 'oh! quite, but I would like to see it,' let us try and make our senses help our minds to believe in themselves.

I ask you to sit down facing me, your hands resting on your knees, palms upwards. Bandage your eyes if you like, so that you may not see what my eyes are doing, and so save yourself from the dangers of suggestion. It will not make any difference, you will know through your hands what my eyes are doing.

I focus my eyes on a spot in one of your hands. In a few seconds you register coolness on that spot. Most people speak of a 'cool draught'. To check your impression, I repeat the experiment on the other hand, on the backs of the hands. Same result. I allow a little time between the experiments, so as to enable your hands to get back to normal temperature appreciation. You may feel more or less than others, but most people, blindfolded, feel something definite, always cool. But I must not strain, I must make no effort, or you will feel nothing. My eyes must rest on the spot quietly. Try it with your friends, experiment, form your own conclusions. One sound, unimpeachable conclusion justifies generations of work.

What does this demonstrate? It only demonstrates that when the eye looks at anything, when the function of vision is being actually exercised, when both the retina and the optic nerve are made to work, an as yet undefined 'something' is taken by the eyes from the surface of the object on which they are focussed.

But in addition we mean to demonstrate that this as yet undefined 'something' is energy, and that it is differentiated by the colour of the object looked at, by the rate of vibration of the light it reflects.

We mean to demonstrate that this energy, differentiated by the colour looked at, will, when absorbed through the eyes into our nervous system, promote certain activities in our bodies; that these activities will vary according to the differentiation, both as to their nature, and as to their

location in our bodies, independently of any conscious reaction or contribution on our part.

We mean to demonstrate that, whether we are aware of it or not, by looking at red or yellow or violet, we extract from those colours energy differentiated by their rates of vibration, that we absorb it into our nervous system, and that this energy once absorbed, with its qualities of vibration, produces in specialized parts of our bodies, reactions that are absolutely governed both as to their nature and location by the light vibration. That whether we are aware of it or not, the mere thought of looking at red or yellow or violet, instantaneously elicits the same reactions, in the appropriate parts of our bodies, and in a degree proportional to the qualities of the thought. And further, that every one of these phenomena will be accompanied by the phenomenon of extraction of energy from the surrounding ether by the eyes, even when the eyes are shut, or the room is in darkness.

Let us demonstrate it through the senses. I ask you to relax your hands on your knees, palms upwards, and not to move them deliberately. I rest my head on some fixed support so as to ensure immobility. I then focus on a point on one of your hands, immediately close my eyes, but go on focusing through my eyelids, on the point I can no longer see. I am not looking. I am seeing nothing. I merely visualize myself looking at that spot in your hand, through my eyelids, for some time.

In a few seconds, you register coolness on that spot. Most people speak of the same 'cool draught', they tell of the same sensations as before. I am only thinking of looking, of seeing. Yet you still register the same coolness, my eyes are still taking that as yet undefined 'something' from the surface of your hand. Try the other hand, the backs of the hands. Same result. Form your own conclusions. But not before you have experimented, with various people, in various ways; that is, if you believe what your senses tell you, if not, you will have to be satisfied with thinking.

What does all this demonstrate? Clearly, that two types of activity are involved in the act of seeing. One is the biophotographic function of the retina which can only come into action when light impinges on it, when the eyelids are

raised and the subject is actually seeing. The other is the energy-absorption function of the optic nerve which can remain active even when the eyes are closed. The optic nerve fulfils its function as an energy carrier, whether the retina does or does not make use of the current involved to convey to the brain the message of a picture.

But, when once absorbed by the nervous system, whether the subject looks, or merely thinks of looking, what does this energy do, where does it go, how and where is it expended?

Scale of vibrations per second and wave lengths.

	Number of vibrations.	Wave length (m/m).
Red . .	450 trillions . .	0.00066
Orange .	500 trillions . .	0.00060
Yellow . .	550 trillions . .	0.00055
Green . .	600 trillions . .	0.00050
Blue . .	650 trillions . .	0.00046
Indigo . .	700 trillions . .	0.00043
Violet . .	750 trillions . .	0.00040

The retina receives something different from each colour. The optic nerve also receives something different, and that different 'something' is not the same different 'something' that the retina is receiving. Two different forces, two different vibrations, are registered by the retina and the optic nerve.

I may look at your hand through pieces of coloured paper. In spite of the intervening paper, you will still feel the action of my eye. You may look at your own hand through the same papers, and you will notice that they do not arrest the rays of the human eye. You may rest a small looking-glass on your hand, I will look at your hand through the looking-glass, as it were, and though I shall not see your hand through that looking-glass, though light rays from your hand will not reach my eye, your hand will feel the rays emitted by my eyes, just as if there were no looking-glass in the way.

Let me look at the reflection of your hand in a looking-

glass. Light rays from your hand will reach my eye, reflected by the glass, but you will not feel the rays emitted by my eyes; these rays will not be reflected by the looking-glass, they will go straight through it. Experiment, and you will come to the conclusion that two kinds of rays are involved in the act of vision; one, a light ray, and the other, an energy ray.

This gives us some idea of what *you* may register, when my eyes are focussed on you or on some object resting between you and my eye.

But when I look at you and produce an effect on you, I am affected by what I see. When I look at red, my retina 'sees' red, it behaves as it would not behave if I were looking at yellow. The same applies to my optic nerve and to my brain centres.

The same may be said of sound, taste, smell, and touch. We react differently to different stimuli. But the difference in the unconscious reactions to sense stimuli goes further and deeper than mere differences in processes of registration.

Let us continue with vision. We know that when I look at you something happens to you for which the light ray alone cannot claim credit. But we only know a portion of what happens to me when I look at you, either directly, or indirectly, through the medium of a looking-glass, used either as an interference or as a reflector. We know less of what happens to me when I focus on your hand through my closed eyelids. We know less still of what happens to me when I look at colours hidden by my eyelids, or when I set that same un-understood portion of my vision mechanism in motion, by merely thinking of looking at you, or at coloured objects.

To enable you clearly to register what happens to you when you look at any colour, or merely think of looking, certain conditions are essential.

Let us bear in mind the order of the colours in the spectrum—red, orange, yellow, green, blue, indigo, violet.

For preference, let the subject be someone completely unaware of what is expected from the experiments, so as to eliminate suggestion and allow natural forces to take their course unhindered.

Let him lie on the back and relax completely. Let him rest like that until he is thoroughly peaceful, and reports that the whole of his body is comfortable, circulation and breathing effortless and rhythmical.

Sit down about two yards away from him, in such a position that your eyes are on a level with the front of his body and can observe its breathing from the side.

As he goes through his period of preparatory rest, the only object of which is to obtain a stable breath, note the amount of expansion of the chest, the pit of the stomach, and the abdominal wall with each breath, note rhythm, rate and frequency. When these have been carefully observed and noted, and when for a few minutes, a constant has been established, the experiment can begin.

Let us imagine that the front of the subject's trunk has been painted in stripes of equal width, to represent the colours of the spectrum, red at the top, violet at the bottom. A red stripe begins at the base of the neck and extends for a seventh of the distance between the base of the neck and the crutch, after which comes an orange stripe, covering the next seventh of the trunk, and so on, till we come to violet, which occupies the seventh ending at the crutch.

Let somebody place his hand, palm down, about a foot above the subject's eyes, and let the subject focus his eyes on the centre of the palm. The hand registers 'cool draught'. One: the subject is seeing the hand, is receiving the light reflected by it; and two: the eye is 'taking' from the hand, an additional undefined 'something' which is not light.

White is complete light. Let the hand above the eyes be covered in a piece of white material. Let the subject focus his eyes, through the material, on the palm of the hand. The hand will still register the same undefined 'something'. The subject will see the white, but not the hand. His reactions will not stop at the mere registration of light, his breathing will be affected. How? White is the complete spectrum. We have imagined that his trunk is painted in stripes to represent the whole spectrum. The rise and fall of the trunk with each breath, will be amplified all the way down from the neck to the crutch, and this amplification will be maintained as long as the subject 'takes in' white. Remove

the white silk and the hand, and after a little while the subject resumes his former breathing rhythm. Not only is this amplification visible to the outside observer, but the subject will notice that an undefined 'something', apparently taken in by him through his eyes, is, independently of his will, being expended to produce additional work all the way down his trunk when the light reflected is white.

After a rest (to enable the subject to re-establish his normal breath rhythm) let the hand be covered with a piece of red silk, and let the subject focus his eyes through the silk on the palm of the hand. The hand registers 'cool draught', the eye registers red. The rise and fall of the trunk are once more amplified, but after a little hesitation, the amplification becomes localized in the upper part of the chest, just where we had placed our imaginary red stripe, and is maintained as long as red is 'taken in' by the eye. Observers and subject alike can register this unconscious reaction. Let us try violet silk. The hand registers 'cool draught', the eye sees violet, and the breath is again amplified, but this time, the amplication travels downwards, until it reaches the crutch, where it remains localized as long as violet is 'taken in' by the eye. Try green, the pit of the stomach; indigo, low down the abdomen, orange, the region of the nipples. And so, again and again, if the subject's nerves and muscles are healthy, if he is in 'life equilibrium', all these things happen by themselves, without any prompting by him, whether he does or does not know the order of the spectrum, and does or does not know of the theory he is being used to demonstrate.

Let us observe the effect of 'taking in' colour on breath frequency, rate, rhythm. Some colours speed up, others slow down breath, some stimulate and some calm it. It is no good telling you which is which—that might be called suggestion. Find out for yourself, draw your own conclusions.

Let us go further. Replace the hand above the subject's eyes. Get him to focus on the palm. The hand again registers 'cool draught', the eye sees the hand. Tell the subject to close his eyes, but to go on focusing on the now invisible palm. The hand still registers 'cool draught' though the eye sees nothing.

Now tell the subject that you are covering the hand on which he still focusses his closed eyes, with white silk, but don't really do anything of the kind. Keep the hand just as it was. The hand still registers the undefined 'something', but the subject's breath is amplified over the whole trunk. The eye, though closed, is still 'taking in' that undefined 'something', and this is still expended in additional work in the whole trunk.

What is the cause of these phenomena? Why does the closed eye still extract from the hand that undefined 'something'? Why does that 'something', when absorbed by the system through the closed eyelids, spend itself in promoting ampler breathing in the whole trunk? Because the subject *thinks* of looking at white.

Tell the subject (with his eyes still closed, though focussed on the hand), that the white silk has been removed, and a piece of red silk substituted. The hand still registers 'cool draught', the eyes 'see' nothing, but the imaginary red band on the upper part of the subject's chest gives fuller heaves, the subjective feeling of activity in that part increases as long as the subject continues thinking of looking at the red silk. Why? For the same reason as before: nothing but thought. The thought of seeing is enough to make the eye perform that part of its function which is concerned with the extraction of an undefined 'something' from the whole length and depth and width of its invisible focal beam. Thought, sufficient to initiate that absorption process, is also sufficient sub-consciously to initiate the process by which the undefined 'something' is expended in localized intensified breathing.

Intensified breathing itself is merely an accompaniment of intensified circulation. The action of the undefined 'something' set in motion by thought, is obviously far reaching.

Let us try violet, green, yellow, any colour. Just the thought of them. The imaginary colour stripe on the trunk responds to the vibration call of its colour mate.

And if the subject's reactions are weak, too obscure for detection by him or by observers, if by any chance they do not correspond with the spectral order, what then? If

white, for example, or the thought of white, does not produce an even amplification of breathing over the whole trunk? If through inhibition, or local organic weakness, yellow or red is left out of white reactions? If the pit of the stomach or the apex of the lungs is diseased, or is the victim of breathing inhibitions, and does not respond as expected? Let the subject concentrate on the thought of the appropriate colour for a few days, during periods of conscious rest, and very shortly, white or the thought of it, will promote ample, even, complete breathing, from lung apex to crutch.

Let the victim of such inhibitions or weaknesses learn to rest with his eyes shut, and to call up poppies, oranges, buttercups, meadows, cornflowers, violets. Changes in health and tone will soon exceed anticipations.

How do we react to the combined thought of two or more colours? Why do certain combinations jar on us? Why do we love others? Why do some jar to-day that did not jar ten years ago? Why do some do us good, and others make us 'ill'? Now, but not to-morrow, in winter but not in summer? In England but not in Spain?

The speed of light does not change. Red for instance is always and everywhere the same, in winter and in summer, in London and in Seville. And yellow and violet and green, just the same, everywhere, always. But we change. With changes of climate, temperature, atmospheric pressure, blood pressure, nervous tension, age, surroundings, health and countless other things, alterations occur in us that affect our sense of harmony. We are in flux from birth to death, and our reactions to stimuli reflect our variations.

Tell the subject to visualize a bunch of violets and poppies. (We are neglecting the experiment of really looking at real flowers, for we know by now that the thought of seeing has the same effect as actual seeing.) What will be the effect? If the subject shows the normal location of reactions, and clearly calls up red and violet, increased breathing will be generated in the upper part of the lungs for poppies, and in the region of the crutch for violets. It will radiate from those centres, in waves that meet and clash in the region of the pit of the stomach, causing a sense

of discomfort, disturbance. The effect is similar to that produced by throwing two stones into a pond, waves being produced around the two centres of impact, and remaining rhythmical until the two sets of waves clash, when disturbance, more or less marked, is detected. But as in the case of the stones, waves may be harmonies or discords, they may blend or they may clash; and with thoughts of different combinations of colours, it will be found that each combination produces a sense of increased activity, either pleasurable or displeasing, in a part of the trunk about half way between the two colours thought of.

For instance, for cornflowers and buttercups, increased breathing might be expected just above the pit of the stomach for yellow, and just below for blue. Yet the combination increases activity in the region of the pit of the stomach, the place that belongs to green, the compound of yellow and blue, and the rhythm and general character of the reaction also clearly reflect the soothing qualities with which green is generally associated.

Where sight is concerned, numerous experiments make it possible to state that there is a general tendency to respond physiologically, in different parts of the body, in a definite order, in sympathy with the order of the colours in the spectrum, to any colour-thought.

There appears to be a similar unconscious observance of scale sequence in the body's reactions to the thought of the activity of the other four senses.

It seems clear that the laws that govern the physiological reactions to the thoughts of the colour octave, also obtain with the sound octave. But if it be remembered that an individual's capacity for reproducing within himself the reactions that normally follow a definite experience is governed by the clearness and definition of that experience, and that a note of music only means a definite thing to musically trained subjects, it will be appreciated that positive results can only be expected from experiments with such musically qualified subjects. Experiments have led the author to the opinion that the trunk reacts physiologically to the musical octave, in an order similar to that obeyed by its responses to the light octave.

For the sense of smell, conclusions of a similar nature may be advanced with some degree of confidence, if not as yet of conviction. It would appear that the objective activities that give rise to olfactory sensations, be they of an etheric or atmospheric nature, can be ranged in one or more octaves, and that just as with light and sound, the organism responds physiologically to individual sensations or to their recall from memory, in a definite order, the geography of which is in close sympathy with the, as yet, undefined sequence, of the olfactory octave or octaves.

A similar statement may be made, with slight variations, in connection with the senses of taste and touch; but the sense of touch might with advantage be subdivided into a multitude of sub-headings, intended to correspond more closely with the many different ways in which we appreciate sensations registered by means of the touch organs.

Enough has however been indicated to open more than one avenue of research. It is felt that these avenues will in time be found to converge on one single point, and that from this point will be obtainable a clearer appreciation and understanding of the intimate interaction of all the activities of which, for the time being, we take cognisance only through the instrumentality of different senses.

To establish conclusively this intimate interaction between various activities of objective origin, which we appreciate by means of separate senses as totally unrelated happenings, does not now appear to be possible. But it seems worth while to record the results of experiments, inasmuch as they are capable of being reproduced and checked by independent readers.

Every one of these experiments aims at discovering the normal physiological reaction of the human body, to the mental contemplation of given sensory perceptions, and its location in the body. It cannot be too strongly emphasized that reactions will be defined in proportion to the definition with which the subject has previously registered the sensation it is proposed to recall. Only where well-defined sensory memories are available will well-defined and localized physiological reactions be obtained. There is no hope of discovering the normal reaction to the thought of eating

or smelling a spring onion with a subject who has never eaten or smelt one; or to the thought of the taste of whisky with a teetotaller of life-long standing.

It has been stated previously, that if the subject be made to contemplate in his mind more than one colour, the thought of certain combinations will be accompanied in the trunk breath curve, and in the subject's sensations, by reactions that will speak of peace, calm, harmony, balance, equilibrium, and any other concept denoting 'rightness', whilst certain other combinations will generate reactions of sheer disorder, discord, discomfort, disruption, and any other concept denoting 'wrongness', and in this connection, the example of the clash between the ripples produced by two stones falling in a pond will be remembered.

The same harmony, or lack of it, can be subjectively and objectively observed, when dealing with the contemplation of more than one olfactory sensation, as for instance, the smell of violets and that of cheese, that of onion and port, or that of lily-of-the-valley and Benedictine. When due allowance has been made for natural associations established by experience, enough material is left over to relate our likes and dislikes, our sensations of discords or harmonies, to the different reactions appertaining to the various sensory appreciations.

But not only can 'discord' or 'harmony' be detected in our reactions to the combined thoughts of different perceptions registered by one sense; they can also be observed when we embrace in one thought the contemplation of the activities of more than one sense.

For instance, the subject will register peace and harmony, and in addition calm, good, though localized, breathing, when made to think of smelling a certain flower and listening to a certain note of music; but as soon as another flower is substituted, though the same note is held, discord follows. He may find peace when asked to think of looking at a green meadow and smelling an onion, but his feelings may change, if, still thinking of smelling the onion, he should at the same time, be asked to think of looking at a red flower.

Not only are there light, sound, smell, taste and touch octaves, each note in each octave finding a sympathetic

chord in a particular centre in the body; not only are certain combinations in any one octave conducive to disorder, and others to harmony; but there are definite 'harmonies' and 'discords' between octave and octave.

Ill-health may displace the normal reaction (e.g. red may cause sensations in the shoulders or hips; blue in the neck, shoulder blades or hips), but mental colour contemplation tends to re-establish the order and position of the spectrum.

The combined exercise of contemplation of motor and sensory activity, stimulates the circulation of energy through the system. It promotes a constant exchange between the subject and the ether.

This constant exchange, this in and out flow of energy, is life.

The more energy we circulate through ourselves, the more we live, the more we evolve; the more we obtain these results by the conscious exercise of our mental faculties, the more we tend to make evolution conscious; the more we make evolution conscious, the better we make our chance of directing it intelligently.

Chapter 10

REALITY IN SENSATION

LIVE vigorously, strenuously, even dangerously. This means, work your motor nerves vigorously, strenuously, even dangerously.

To this advice, has been added this other: THINK of living vigorously, strenuously, even dangerously. You will make your motor nerves carry energy from the brain to the muscles and organs. This energy will be spent in subjective work, in your muscles and organs, in your bones, in your cells. It will make them fitter for the work which in your mind you have contemplated yourself performing. This energy will be spent consciously; you will know about its workings, about their why and wherefore, about the methods of nature. You will find it is interesting to take a conscious part in your evolution.

Since birth, you have sent energy from your brain, by thought, through your nerves, to your limbs and organs, for work.

But whenever you have done so you have not been conscious of that energy itself, or of the fact that it was arriving at its destination; you have been conscious of the objective work that was being done with it. No sooner had you sent it from the brain to the limbs than it left you in work outside you. It never stayed in you long enough for you to be conscious of its action in you.

Yes, perhaps it did, occasionally, when you were self-conscious, face-conscious, and blushed. Then you felt energy working in your face, burning.

You were then given the chance to observe how your thoughts acted on your circulation, to discover how, by changing them in certain ways, you could control your circulation, just as easily as you could control your fingers,

feet, tongue, or eyelids. Perhaps blushing in any part of the body is not just a gift, it may be an art, or a science? Practise contemplation of motor and sensory activity, and find out!

Contemplation of motor activity must have as its foundation experience of motor activity. Before we can hope to visualize ourselves running we must have had experience of running, either through running ourselves, or through watching others run. Contemplation of sensory activity must have as its foundation experience of sensory activity. Before we can hope efficiently to visualize ourselves seeing, hearing, tasting, smelling, or touching anything, we must have had experience of sight, hearing, taste, smell or touch. Thus, for the contemplation of sensory activity, until someone can develop the power of speech sufficiently to convey to one born blind the meaning of the gift of sight, we shall have to rely on personal sensory experiences.

The higher the quality of actual motor or sensory experiences registered by the subject, the more efficient will be his mental contemplation of those same experiences.

We must learn to sense, clearly, vividly, with full definition of detail, exactly what running, swimming, seeing, hearing, etc., really do mean. We must then learn to make new combinations of our motor and sensory experiences, for it is only on such new combinations of well defined experiences that we can build the prototypes of new evolutionary steps.

The actual steps will seldom be as good as their prototypes, and certainly never better. Such expressions as: 'Little did he know how well he wrought,' 'I never dreamed I could do as well,' 'I didn't think I could play such a good game,' are fundamentally misleading. It very often happens, that a man, when producing a certain piece of work or when beating an opponent he looks up to as his master, has no very accurate idea of the value of his work relatively to some other work, or of the quality of his play as compared with someone else's play. It is conceivable that neither before, nor during performance, did any thought of actual comparison, weighing up of relative merit, ever enter his mind. In this sense, the expressions quoted above are sound.

But it is incorrect to understand that the individual has no conscious part in the actual conception of the action that leads to expressions of surprise and wonder.

Every single movement a player makes in any game, however surprising its excellence may seem to its author, is preceded by an act of conception for which the author is responsible. This act of conception must have had embodied in it every single perfection that eventually distinguishes the completed movement. That the subject must, in all cases, be actually and consciously cognisant of his creative mentation, is not suggested, the degree of consciousness involved in any act of conception being liable to infinite variations. In many cases, and most markedly so in games, where the actual conception of a stroke and its execution must of necessity follow each other with amazing rapidity, the subject is not given the material time in which to become conscious of his creativeness, but this relative lack of consciousness of creation in no way alters the fact that no action, however perfect it may appear, can in any particular ever exceed in perfection the prototype on which its very being is founded.

Refusal to accept this leads one to the conclusion that the highest an individual may produce, very much to his surprise, is the result of coincidence and luck, and it turns the 'thinker' into a blind follower of the philosophers of Laputa, whose most masterly and deepest treatises were obtained by the simple expedient of shaking type in a bag, and printing the result of this extremely interesting form of type-setting.

High quality results cannot be obtained from mental contemplation of either motor or sensory activity, unless the subject is in possession of high quality concepts of either motor or sensory activity, and the essential need for acquiring high quality motor and sensory experiences is obvious.

Identical experiences need not produce identical Experience.

The amount of experience an individual extracts from a perception, and therefore his capacity to reproduce that perception in his mind with any variations he may care

to introduce, depends entirely on the degree of consciousness of his experience in all its details, whilst it is actually being experienced.

This consciousness in turn is governed by his capacity for concentration on the observation of his experiences, and of all his subjective reactions to them.

The material, out of which he can build in his imagination the mental prototypes he intends to manifest, is to be found in the sum of his experiences, motor and sensory, to which is added the exercise of his capacity for forming new concepts by the combination of any number of experiences.

The usefulness of any possible combination of experiences formed by his mind, rests ultimately on the degree of consciousness of those several experiences in all their details and ramifications.

The aim, therefore, becomes to achieve the highest possible degree of consciousness of all we do and sense, the utmost possible awareness of all that goes on within us with every single manifestation of life.

This demands a schooling which must continue throughout life. No valid reason can be adduced for its interruption, since the law that governs it applies to all ages and conditions.

This schooling is a matter for the subject himself; he alone can map out its shape and select his goal. Advice as to the method best adapted to the end in view is all he must expect from others.

To acquire clear and well-defined consciousness of motor experiences, develop the habit, whenever you are doing anything for which you wish to develop efficiency (let us say running or swimming), of clearly registering whatever you feel whilst you are performing the act in question—which applies both to objective and subjective appreciations, though the latter are the more important. This will make the exercise of mental contemplation infinitely more vivid, real and efficient. The more clearly defined your appreciation of sensations, as well as of actions, the better.

The advice given about swimming or running holds good with every other form of activity, on whatever plane it is indulged in, physical, mental, moral, spiritual. Get rid of

the useless habit of doing anything in a half awake condition. Concentrate, always be fully and ever more vividly aware of all you are doing. This is of infinitely greater importance from the point of view of progress and evolution than the actual objective result of your activities.

In order to turn the exercise of mental contemplation of motor or sensory activity into a creative force, it is of the utmost importance that the subject should not rest satisfied with the mere reproduction in his mind of performances already within his reach. He should endeavour to improve in his mind on every single experience recalled, to formulate ideals of performance always distinctly in advance of any function performed, to develop visions of himself always doing distinctly better than ever before, and thereby giving his evolving self an ever improving model to work to. What is more, as progress is found to respond to creative thought, and the subject finds his manifestations approximate more and more to the deliberately formulated ideal, he should take every care always to develop his ideal at least as rapidly as his response to it.

Let us take the youthful and ambitious athletes going up to college, full of visions of honours to come. Let us assume that two such boys have in childhood shown promise in the hundred yards and the long jump. Find the form of training most likely to produce the supreme athlete.

Granted, nothing can replace actual running and jumping. Therefore, let both boys be submitted to the same routine of physical culture, running and jumping, conditions being made as similar as possible for both.

Let a master, patient, painstaking, versed in psychology, take one of the boys in hand and coach him roughly as follows (few boys could, unaided, appreciate and apply the principles involved, at any rate in the early stages):

Firstly, the boy must be taught to concentrate his mind, whilst actually running or jumping, on all his sensations, on all the changes that running and jumping bring about in him, on the feelings of effort, strain, speed, stimulation of breath and circulation, muscular sensations, exhilaration, the final effort, the sense of relaxation after that effort, etc. He must learn to concentrate on the observation, registra-

tion and memorizing of all these things, so that he shall be able to recall them in detail and improve on them in contemplation.

His attention must be drawn to the changes in his sensations, when he passes from a poor to a good performance.

Let us assume that he does the hundred yards in 12 seconds and jumps 18 feet.

Bedtime is most suitable for mental exercises. Let the boy lie down on his back, let him stretch every single muscle in his body and then clasp his hands over the pit of the stomach and cross his feet. Let him rest like this for a few minutes, completely relaxed, eyes closed, until everything in him is calm and peaceful, and a stable function rhythm has been secured. Then let the master address him on the following lines: 'You remember the hundred yards, this afternoon, against Jones, Robinson, and Smith? Right! You remember what you felt like as you ran, chest, arms, legs, etc.? Right! Now go through that race again, in your mind. I will start you. You won it in 12 seconds this afternoon, but this time I want you to do it in your mind in 11 seconds, dead.'

. . . 'But I can't do it!'

. . . 'I know that. But you can think of doing it, you can imagine yourself doing it.'

. . . 'Oh! yes, I can do that.'

. . . 'Right then! I am going to start you. Get ready. Take your mark, get set, one, two, three. Go! Watch your legs working, watch your arms working, watch your lungs. Put all your strength into it. Faster, faster, faster, 20 yards, 40, 60, 80, 100.' (The master should describe the race, briskly, vividly, racily, in the boy's language, watch in hand.) 'You win in 11 seconds, dead! Now rest and watch your feelings.'

The boy's system will show all the reactions it would have shown after actually being submitted to that hundred yards. The heart, the circulation, the lungs, metabolism, the nerves, will behave much as they would during and after a race, but no energy will have been spent objectively; the whole of the energy released will have been expended on evolution instead of on displacement.

Let the same course be followed for the long jump. The boy did 18 feet, let him be made to do 20 in his mind. When he has done it in his mind, let him rest and watch his reactions. They need not be described, nor need conclusions be drawn. Both will be self-evident.

The following night, let the time for the hundred yards be 10 seconds, and the long jump 22 feet, then say 9 and 26, then 8 and 30, then 6 and 40, then 4 and 50. The boy, and most men will say—'Absurd! Mad figures! No man on earth can do these things!' We are not talking about what can be done to-day or may be done in the future, we are simply dealing with a method, the aim of which is to establish in the system during its period of subjective activity of repair and creation, a tendency to the highest possible evolution in definite, controlled directions.

The boy with whom the latter method is adopted regularly before sleep, in addition to the general training routine, will progress considerably faster than the other, at less cost to himself, and will become a distinctly better athlete. After a few bouts of coaching, the boy will be able to follow the practice by himself, unaided, and results will more than satisfy him. They will lead to his appreciating the principles involved, and very little will be needed to make him realize their worth, and induce him to apply them not only in the field of athletics (a very minor matter after all), but in every single field in which he longs to progress, and so to take the first steps in conscious control of his own evolution in any direction that consideration will show to be desirable.

If any doubts are entertained as to the practical value of the method suggested, let our 'Varsity athletes put them to the test, and should results prove conclusive to them, let them draw the further conclusions and make the wider applications that their own minds will suggest.

But great as are the results that can be secured by mental contemplation of motor activity, these can be considerably magnified and improved, if they be preceded by mental contemplation of sensory activities intelligently selected.

It must be borne in mind that whilst the nature and

quality of the evolutionary reactions to mental contemplation of motor activity are governed by the nature and quality of the thought contemplated, their magnitude and amplitude are governed by the amount of energy available in the nervous system for distribution to any part of the system, and of expenditure on metabolic work of evolution in that part. It must also be remembered that mental contemplation of sensory activity has the effect of promoting an intake of energy from the surrounding ether by the nervous system, part of which becomes available for consciously directed and controlled expenditure in metabolic work, under the influence of mental contemplation of motor activity.

The results secured by the young athlete referred to above, would be considerably improved if the mental contemplation of motor activity (in this case, running the hundred yards and doing the long jump) were preceded by contemplation of sensory activity, roughly on the following lines. In the early stages the same master is in charge, placing the requisite thoughts before the boy's mind. Later on, when he has understood the principles and the mechanism involved, the boy can look after himself.

The master speaks: 'Listen to me, and try and visualize things as I put them before you. Three o'clock in the afternoon. The sun is shining brightly into your room. Everything in your room is snow white, the walls, the ceiling, the furniture. In your mind look at all the white, take in its whiteness, bathe your eyes in the whiteness all round you.' Let these thoughts or similar 'white' thoughts be repeated for a while, so as to fix the subject's mind on white, and observe changes in breathing activity. If in the breath wave from shoulder to crutch, any special part of the trunk should indicate by its action that there is any local lack of freedom, the subject's mind should be made to dwell on the colour in the spectrum corresponding to that part, so as to amplify the breath curve in its weak section. Experience would make it appear wise to terminate the colour thought exercise with concentration on green, which amplifies breath in the pit of the stomach, and tends to accentuate the condition of relaxation.

What is the nature of the phenomena that combine to form sensation?

It has been experimentally demonstrated on numberless occasions, that with very little practice the average human being can so act on his nervous system by thought as to reproduce the exact sensation that arises when he is acted upon by any stimulus. One particular experiment which has been repeated over a number of years may be quoted as it will make further thoughts clear and can be successfully reproduced by almost anyone.

It is assumed that the subject has had experience of lying naked, or in bathing costume, in strong sunshine.

Since in relaxation (which presumes elimination or very great reduction of motor activity) our capacity for appreciating sensation is at its highest, the subject should be asked to lie down flat on the back, and to relax completely on the lines previously indicated.

He should be allowed to rest in that condition, undisturbed, for a few minutes, after which the experiment may begin. He should be addressed as follows: 'You can remember lying down on the sand at the seaside, or in the desert, at the hottest time of the day, when the sand is literally burning to the touch and the sun is blazing overhead. Will you please watch yourself lying naked in the sand and feeling it pouring out its sun warmth and energy into you. Notice the feeling at the back of the head, the neck, the shoulders, ribs, waist, hips, the back of the thighs, the calves and the heels. Observe at the same time that the sun is shining on you, and feel it. Feel it striking your face, your neck, chest, pit of the stomach, abdominal wall, thighs, shins and feet, and observe that it goes on striking those parts. Observe that the sun energy is coming into you, both from the sand below you, and from the sun above, that it penetrates deep into you, is absorbed by your blood, and with your blood, circulates within you to the marrow of your bones. Watch the activities this generates in you, the sense of well-being it promotes, and continue watching this developing more and more strength.' These words should be spoken slowly, deliberately, to give them time to soak in.

Some will object 'Suggestion!' just as if the mere mention of the word completely vitiated an argument and finally put it to rest. Is it not high time that the awe in which this appalling word 'suggestion' is held, were once and for all overcome? Of course it is suggestion, there is no sun, no sand, no heat, no beach, no desert, all these things are merely suggested. But that in no way alters the fact that the reaction to the suggestion is real enough, that the subject feels exactly as he would feel if the things suggested were present, reacts in his mind, his nerves, his circulation and his metabolism as if they were—and benefits accordingly.

The only difference, where there is any, is one of degree, and this is governed by the vividness of the image called forth, coupled with the amount of energy available in the nervous system for the materialization of that image.

Of course all this is suggestion, no one would dream of denying it. But everything is suggestion. You only manage to put on your hat, to blow your nose, to eat your food, because you first suggest these actions to yourself.

If it is a fact that self-suggestion is absolutely indispensable before any conscious action of any kind can take place, why do people find it so terribly difficult to accept that the same law may hold good for all sub-conscious actions? Why do they find it so much easier to accept by implication that unconscious actions just happen without any intelligent or intelligible force having any say in the matter?

Why cannot they understand that our continuous sub-conscious or unconscious actions, the heart-beat, breath, circulation, digestion, only persist in virtue of the unconscious suggestion involved in the memory of their having been done before, and done in a certain way, with a given rhythm; individual memory, organic memory, cell memory? Why can they not see that just as in conscious life the first performance of one act involves the suggestion of its repetition, and actually facilitates that repetition by the formation of nerve habits, so in sub-conscious life, every single heart-beat of a given type and rhythm is a suggestion for the next to reproduce the model just given? Every change in its rhythm is the result of some suggestion such as that involved in the act of running, and itself implies a

suggestion for the permanent adoption of the new rhythm.

That this suggestion for the permanent adoption of the new rhythm by the heart is not acted on by it, once running has ceased, is due, partly to the fact that running and the suggestion involved in it have been discontinued, partly to the fact that the more firmly established memory suggestion of the normal rhythm is thereby allowed to reassert itself, and under certain conditions to the fact of exhaustion. The fight between different suggestions made to the heart is won by the one most firmly established and most strongly asserted.

Why then this fear of the word 'suggestion'? Why these hands thrown up in horror at the mere hint of it, in that most delightful of all breaches of logic and consistency: the suggestion that 'suggestion' is a wicked ungodly thing; a suggestion on which the suggestor immediately acts!—thereby proving his suggestibility?

Let us look 'suggestion' straight in the face! We cannot do a single thing without it! We cannot move ourselves, our fingers, our hands, our tongues, we cannot move inside ourselves without it! Our sub-conscious routine, the normal rhythm of our functions, cannot be altered or affected by us in any one single particular, without suggestion playing its part in the process, and it is only after suggestions of new and better modes of function have been put forward, that new and better levels of metabolic activity can be attained, and maintained. Their maintenance and that of the evolutionary changes they tend to promote, endure only if the new suggestion is itself repeated and maintained long enough and strongly enough to make its own neurone paths more deeply grooved than those they are intended to supersede.

Suggestion need not of necessity come to us through our conscious mind, it need not originate in our conscious thoughts or in thought consciously placed before us by other minds. It can enter the consciousness through any outside stimulus, such as a glass of port, a piece of music, a lovely painting, a ray of sunshine. All these stimuli suggest different reactions, and when we do not react according to

anticipation, our consciousness of the stimulus is not the same as that which would have followed a reaction more in accordance with anticipation.

In other words, in sensation we are conscious, not of the action of the stimulus itself, but of our first unconscious reaction to it. What we feel when the sun is shining on us, what we appreciate, is not the action of the sun, but our unconscious reaction to that action.

The sequence of events and the nervous circuits involved are as follows: sunlight and energy promote in our cells activities made up of both sun and cell nature. This is followed by a nerve message to the brain, which we answer with an unconscious message from the brain, resulting in circulation and blood-pressure changes, of which we then become conscious.

It is the consciousness of these appropriate circulation and blood-pressure changes which we are pleased to call sun-consciousness, the feeling of the sun shining on us. It is when these—our reactions to sun action—begin, that the sun action begins to do us good: when nerves and blood vessels react, and when we register their reactions, and not the sun's action. We don't feel the sun, we feel our answer to the sun's message. It is not the sun that does us good, it is we who do ourselves good by answering the sun as we do, and we only know the sun, not by what it does to us, but by what we do to ourselves when we meet it. The same sun means different things to different people. They do not answer it in the same way, they react to it in odd manners, and benefit or suffer accordingly.

We do not know and appreciate the various manifestations of the objective world for what they are to us, by their characteristics and peculiarities, but by the characteristic and peculiar reaction we offer to each one of them. When we say that certain things do us good, make us feel better, we really mean that our reactions to certain external stimuli do us good, suit us, make us feel better.

The point is, that these reactions to external stimuli—the one thing that really matters to us in sunshine for instance—follow the thought of sunshine, whenever it is recalled, provided they, our reactions to sunshine, have once

previously been observed, noted, memorized. The degree of strength and accuracy with which they follow the recalling thought depends on the individual himself, his development, his own efforts and powers.

By walking for the first time, the child suggests to himself the repetition of the act, and by further walking both facilitates repetition and suggests to himself yet further repetitions. So also in sub-conscious life, when we bask in the sun for the first time, becoming conscious not of the sun but of our reaction to it, we suggest to ourselves the repetition of this reaction; by its recall to memory we both facilitate the further repetition of it and suggest to ourselves yet further repetitions. Provided we can, once in our lives, experience and clearly memorize the reaction which the healthy and physiologically efficient human being offers to the sun action, whether we get that one reaction through the sun itself, or through the substitute sun of an arc lamp, or through the words of an inspired speaker who can bring things to life, it is ever afterwards ours for the recall, for the asking, if we but keep it fresh and clear in our memory by frequent and live recalls.

What is more, it is within the power of our minds in such recalls of past experiences, so to amplify and magnify them, so to alter and improve them by intelligent combination, that we shall in time be able to generate within ourselves actions and reactions that the strongest sunshine could not call forth unaided.

To what extent the reaction of the individual matters in sunshine will be made clear, if we consider how the same sunshine will produce two entirely different reactions in two human bodies lying side by side having a sun-bath in the desert, one alive and the other dead. We learn very little of benefit to health by studying the decomposition of the corpse; but much can be learned from the reactions of the living man, and their variations as he changes his mental attitude to the sun overhead.

Enough has been said to establish the value of mental contemplation of motor and sensory activity. All that remains is the need of general guidance as to the most efficient routine to be adopted if the mental contemplation of

sensory activity is to be made a powerful instrument of conscious evolution.

First and foremost, the individual must possess himself of a store of actual sensory experiences of the highest quality and degree of consciousness attainable.

The greater the number of such experiences, the greater the number of combinations of them he will have at his disposal.

The higher their quality and degree of consciousness, the higher the quality and value of the reactions called forth by contemplation.

Secondly, having acquired, and continuing to acquire, sensory experiences of high quality and consciousness, the individual must learn to appreciate the distinct physiological effect produced in him by each separate sensory experience. He will observe the action of each on circulation, breathing, the nervous system, the mind, character, etc.

Thirdly, having appreciated their several capacities for influencing him for good, he will learn to select from his store of sensory memories those it will be most advantageous for him to recall at any given moment.

Fourthly, preparatory to recall, he will relax, and apply the laws of polarity, so as to possess himself of the greatest possible quantity of energy.

And fifthly, he will recall the selected sensory memories as vividly as possible, and observe his reactions to these recalls.

These practices should be continued consciously, sufficiently long to establish them as habits so profoundly rooted that they supplant former unconscious habits. When this stage has been reached, but not till then, the practice may be relaxed, care being taken to check any relapse into former ways.

The fear has been expressed that these practices may develop an exaggerated tendency to morbid introspection. Practice has invariably shown the exact opposite to be the case. Subjects tend more and more consciously to rejoice in a new sense of well-being and appreciation of life, and to feel ever increasing pride in the glorious possession of a mind, nerves and body that function perfectly.

Chapter 11

ATOMS

That part of the universe which we appreciate through our senses, is composed of matter.

Matter is composed of atoms.

The atom is composed of protons, or positive charges of energy, forming the nucleus, or sun, of the atomic solar system, around which revolve electrons, or negative charges of energy.

The number of protons and electrons in any atom varies from one to ninety-two, and each one of the possible ninety-two combinations forms one of the ninety-two elements of matter.

The electrons revolve round the nuclei at velocities that few minds can conceive, and their revolutions may be performed in orbits of different diameter.

An electron may pass from a small orbit to a larger one or vice versa, the atom, in the process, either releasing or absorbing energy.

The electron is also capable of changing the constitution of the atom by leaving it altogether.

Altering its orbit or leaving the atom appear to be the only methods by which the electron can liberate atomic energy. Detaching itself from a particular atom and attaching itself to another one may be the only method by which it can alter the constitution of matter.

We are not satisfied with the state of the part of our universe which comes under the observation of our senses, and most of us are prepared to state that things might be changed to great advantage.

The imperfections which our senses register in our universe can all be traced ultimately to the wrong kind of matter, in wrong quantities and proportions, in the wrong

place, at the wrong time; whatever the cause of this state of affairs, be it chance or law, matter or thought. This statement may appear, though inaccurately, to involve a materialistic conception of our universe. Any amelioration of that part of our universe which comes under the observation of our senses, must involve the displacement of matter in certain proportions.

The agent controlling readjustment must know:

I. What is wrong in the existent distribution of matter, and why it is wrong.
II. What is the ideal distribution, and why it is the ideal.
III. The means to produce the desired readjustment.

The individual (that, in us, which remains identical with itself despite body changes) is continually observing one particular part of his universe, his body. The result of such observation is that the individual is not completely satisfied with the kind of matter contained in that body, its quantities and proportions. This is not to be wondered at, for it is to this wrong matter, in wrong quantities and proportions, in the wrong places, at the wrong times, that the body owes its liability to illness and death. Not only is the individual engaged in the more or less conscious observation of his body, this conglomerate of matter, in wrong quantities and proportions, in the wrong places, at the wrong times, but he is continually engaged in promoting changes in this matter, in its quantities and proportions.

In spite of the best intentions, every successive change tends to produce results gradually worse than those of preceding changes, for, as it speeds through its three score years and ten, the body accumulates matter more and more in wrong quantities and proportions. We age and die only because either through ignorance or stupidity, or incapacity, or ill-will, we allow wrong matter to enter the body, in wrong quantities and proportions, at the wrong times, to settle in the wrong places, and to remain there undisturbed, through our neglect of our power to alter its quantities and proportions, or to expel it.

To effect a change in the matter of the body, we make

use of either diet or thought. That diet is capable of effecting radical changes in the whole material constitution of the body, and that these changes may be for the better, although they need not be so, is patent. The why and how of food will not here be dealt with.

That thought can also achieve this, is less obvious. Here are some facts:

The brain is the instrument through which we are conscious of thought, and control its manifestations. Whether it functions efficiently, or whether it is an instrument of inhibition, as it were a veil through which we dimly perceive thought at work, does not concern us.

Every part of the body is connected with it by nerves, either directly or indirectly. The severance of a nerve leads to the breakdown of the part it connects with the brain.

It follows that some influence is exerted on every part of the body, through the instrumentality of the brain, the function of which is thought, conscious or unconscious.

This influence must be material, it must involve work, material change, which needs liberation of energy, atomic changes, electronic orbital changes.

That is, thought acting through the brain, ultimately effects electronic orbital changes, resulting in liberation of energy, work, change in matter distribution, quantities and proportions. It also impels electrons to leave individual atoms and attach themselves to other atoms, producing thereby constitutional changes in the matter of the body.

Changes so effected must be of the kind indicated by the thought involved. Denial of this produces the absurdity that the thought of running, for instance, tends to immobility, and that of immobility to speed; that every suggestion, whatever its nature and field, be it positive or negative, objective or subjective, either produces its exact opposite, or does not influence its outcome.

The fact that thought promotes body changes in harmony with itself, changes involving suitable atomic and electronic responses, presupposes on the part of atoms and electrons a capacity for producing such suitable and appropriate responses to thought.

Speculation as to the character of this capacity, as to

whether it involves atomic and electronic intelligence, or merely irritability, does not concern us.

One may postulate that the whole range of atomic and electronic activities is capable of being called into being by thought. Failure to do so involves the statement, unsupported by facts, that thought can produce in electrons only limited variations of speed and changes of orbits.

One speculation, however, seems worthy of investigation: is the electron capable of velocities in excess of that of 180,000 miles per second (very little short of that of light), which it is known to attain on occasions, and if so, what happens to the electron?

Matter is energy in motion. The ultimate velocity of matter is 186,000 miles a second—which proves no more than this: science has no means of appreciating velocities in excess of 186,000 miles a second, should these be attainable or in fact attained.

May the truth not lie in some conception such as this? Thought, energy and matter are interchangeable. Thought, in action, becomes energy. This in motion is appreciated as matter, which, when it exceeds velocities of 186,000 miles a second, returns to the state or condition of thought, and as such, eludes the senses? This would bring us back to the conception advanced in Chapter 1: thought, energy, matter; the Trinity of all eras and creeds, the sufficient ultimate causes of all manifestations, God the Father, Creative Thought, God the Holy Ghost, all-motive Energy, God the Son, the Trinity made manifest to the senses of man, in matter.

The Trinity, in this simple form, may in time be acceptable to both Churches and Science, and free many from the terrifying thought that God is super-natural or unnatural, that His works involve miraculous breaches of natural laws. He could then be looked upon as that which He really is, the one absolutely and utterly natural being, eternally law-abiding in all His works.

How can thought be controlled so that only the most advantageous changes may be obtained, in the most efficient manner, at the lowest cost, in the shortest time possible?

An illustration may serve to make clear a mode of action which has produced efficient results.

Two colonels, of equal soldierly qualities, are on the same day put in charge of two battalions of recruits. One is a Londoner bred and born, the other, a Yorkshireman. Both units are composed of Yorkshiremen.

In those circumstances the battalion in charge of the Yorkshireman (assuming recruits of equal intelligence) will make more rapid progress in drill, in perfection of execution of complicated movements, than that in charge of the Londoner. The reason for this is: the Yorkshireman speaks the language of his men, he is better able to get in touch with them, to establish intimate contact, to bring the personal equation into play. He is much favoured, it is easier for him to come down to his men, to reach their understanding, than it is for his brother officer; and nothing but failure can follow from insistence that the men must come up to the colonel's level before contact can be established.

The whole secret lies in this: the Yorkshireman speaks the language of his men. Granted that he is as good a soldier as his brother officer, he will get better results.

The matter in the body is wrong matter in the wrong places, in wrong quantities and proportions. Thought, by the instrumentality of the brain, can change this matter. Its possible action on it covers the whole range of atomic and electronic activities. This change will be efficient in proportion as the thought is conceived and applied in the 'language of the atom'.

What is the language of the atom? Let us learn it, speak it to our atoms and electrons. Let us get into direct touch with them, bring the personal equation into play, and there is no telling what results we may not get out of our battalions.

When our colonels first receive their recruits, these are possessed of certain potentialities, as soldiers.

Given at that time, the command: 'Form fours, by the right, quick march!' will produce nothing but a chaotic display of incompetence. Yet in a few months, these same men will be an example to the world.

Their capacities will have been brought out more rapidly in the case of the battalion commanded by the Yorkshireman than in the other. The colonel will then have established personal contact with his men.

The mind can consciously establish personal and more or less direct contact with the atoms of the body it controls.

In the perfect movements of the trained battalion we perceive the action of the colonel's mind on the atoms and the electrons of his men.

But since a relatively large number of different performances will be expected of recruits during their military career, their training is a long process.

Atoms and electrons, however, are recruits the capacities of which are distinctly circumscribed. However useful they may be in their particular way, there are very few things that they can do. To them these things are second nature, they require no learning, no teaching, they come as gifts from the gods.

All the atom can do it does only as a reflection of what its electron or electrons are doing. It has no activity apart from theirs.

All the electrons can do is to spin round the nucleus, more or less rapidly, at velocities, the variations of which necessitate changes of orbits, and may, if carried to extremes, result in one or more electrons detaching themselves from their present atom, and thereby not only altering the quantity and sign of the energy it liberates, but changing the nature of the atom itself.

Electrons are doing this all day and all night long, in the human body, under the influence of thought.

But when thought initiates such activities as it does when the subject decides to run, the resulting run, with all the characteristics that make it the particular run of a particular individual in particular circumstances, is governed by that individual's consciousness of what running involves. To him, we may assume, this is a rapid movement of legs and arms. As he prepares to run, his mind is occupied with motions of legs and arms doing what amounts to running. Very little more is involved. He does not concern himself with the rhythmic contraction and relaxation of different muscles, he

does not bother to think about millions of perfectly timed nervous messages, nor about circulation changes. Less still does he concern himself with the atomic and electronic changes that are the indispensable foundation of any run.

He does not bother about these things. He relies on their having become unconscious tricks of his trade, perfectly satisfied that he sub-consciously knows all the requisite tricks by heart, and never fails to perform them correctly. This learning by heart of millions of little tricks by the sub-conscious has taken a few thousand years of evolution, man is taking them for granted, never dreaming of consciously checking or stimulating their good performance.

One may doubt whether this lack of personal interest in the activities of his atoms is sound policy. One may imagine that freedom from personal supervision for many ages has led them into bad habits, laziness, inclination to take always the line of least resistance, to work just a little less well than would be the case if an exacting taskmaster were always on their heels, instead of leaving supervision for ever in the hands of subordinate platoon commanders, as the mind does when it thinks of running in terms of leg movements instead of in terms of atomic activities.

Let us experiment. Lie down, completely relaxed, hands clasped, feet crossed. We know that when we mean to run the kind of run we produce is governed by the kind of running we have in mind, and by the definition of our running images.

The greater the speed we have in mind, the faster the run; the slower the motion we think of, the more sedate our displacement.

Let us assume that our object during this experiment is to find out whether we can make our electrons accelerate so that they will jump from a small orbit to a larger one, from this to a larger one still, and so on, until they get to the last orbit possible, and by a last effort subtract themselves from the attractive action of their nuclei, and sally forth into free space and temporary independence.

Can we do this? Can we at will, liberate or absorb energy, for no objective purpose whatever, merely for the pleasure

of liberating or absorbing it, of playing with the minutest of our known components?

If we can secure this result by action of the mind, it is obvious that the type of thought required must be akin to, must be the prototype of, the anticipated result. If we wish atoms to spin faster, before we can make them obey. we shall have to evolve a picture, a working drawing, of multitudes of atoms going round faster and faster, like myriads of little catherine wheels revolving at terrific speeds, and always going faster and faster, until, suddenly, the moment arrives, when these millions of little catherine wheels can no longer hold together, thousands and thousands of explosions take place, and free electrons shoot off in all directions.

Let us try, lying down, whether we can form such series of images, of stupendous activity taking place in the whole of our brain, and coming to its sudden climax of numberless explosions. If we thus think in terms of circular motion in the infinitely small within us, we are using the language of electrons, on the only subject about which they understand anything at all: running round in circles, more or less rapidly, and occasionally leaving the circle and shooting off at a tangent at a terrific speed.

The more clearly we visualize multitude, the greater the mass we influence; the more clearly we conceive velocity, the more velocity we get; the more explosions and the more violent, the greater the probable fun; the more life we put into the picture, the more life and energy we get out of the little game; that is, if the whole thing is at all possible.

Natural and justifiable scepticism apart, when this is well done, the explosion picture sends through the whole body, and in a flash, an indescribable thrill of energy, akin to a vitalizing galvanic current, and leaves the subject with the uncanny sense of having been completely refreshed in the twinkling of an eye. Fatigue, weariness, seem to vanish in that one instant. Is this possible? It is a fact, and like all self-respecting facts, can, with continued practice, be reproduced at will by almost anyone, and most clearly so under suitable tuition.

After the brain, let us apply the same principle to the

whole of the spine, then to the pit of the stomach, then to any part of the body that is sore or painful. With practice, pain vanishes in a flash.

The process can also be reversed, by the use of the following image: in the brain, countless multitudes of atoms are spinning very fast, as is their custom. Electrons are circling round on various orbits, and as the mind observes their activities, they begin to display a tendency to slow down. This tendency gets more and more marked, and as time goes on the electrons leave the outer orbits, jumping down to smaller ones, and continue doing so until they reach the smallest orbit possible. Further deceleration so reduces centrifugal force, which alone counteracts the attractive power of the positive nuclei, that electrons fall into them. Odd protons and electrons neutralize each other, and cease to manifest as matter.

An interesting picture, this. It seems full of possibilities for speculation. Is it conceivable that the interchangeability of the three components of the Trinity that underlies all creeds, thought, energy, matter, should operate concurrently in two directions? Does thought become energy, which in motion manifests as matter, which, when its velocity exceeds that of light, becomes thought, again; and does it, by the reverse process, slow itself down to appear as matter, and by further deceleration, return to the matterless state of energy, thought? Is this the secret of 'Positive' and 'Negative'?

This is a point which Science may one day elucidate objectively, but perhaps not before man's consciousness will have done so, by the use of his evolved intuitive faculties.

But whether one process or the other, or perhaps both, are adopted experimentally, what purpose do they serve, if any?

Practice, constant repetition of the experiment, will give to this question the only answer worth having—the lesson of experience.

The effect can be summed up in a few words: intense metabolism, rapid overcoming of fatigue, efficient renewal of tissues, activity, resiliency, intensification of the sense of life.

If to the intensification of vital processes of change be added that of conscious guidance of evolution, results are both more marked and more beneficial.

The period of intense metabolical activity which follows the thought of the final explosion of multitudes of atoms is in its turn followed by one of readjustment easily observed by the subject.

This latter period should be occupied with the mental contemplation of motor activity, the thought of running, swimming, or indulging in any form of activity, physical, mental or spiritual, in which efficiency is desired. A few days of practice will produce results so obvious that they will leave no doubt whatever in the subject's mind as to the beneficial nature of the exercises.

Chapter 12

LEVELS OF CONSCIOUSNESS

It is not intended that the individual should always and daily, go through the whole of the exercises advocated.

He should consciously correct bad sub-conscious habits, substitute for them new and better ones, and as soon as this is achieved, return to his former custom and allow his subjective work to be performed unconsciously, merely keeping an eye on it, ready to check any tendency to former faults by temporarily resuming conscious control.

When the subject has corrected his subjective technique to such an extent that after an hour's sleep or rest he is conscious of a sense of well-being and efficiency exceeding in quality any previously produced by a sleep or rest of equal duration, he is justified in concluding that, as he feels better after sleep or rest, the activities of both are of better quality.

Man is lazy; the best of us are liable to slackness. This is as true for our sub-conscious work as it is for our conscious endeavours.

It is a mark of laziness that in its growth we lose consciousness of its existence and only awaken to it when we discover its disastrous effects.

The subject makes the unpleasant discovery that he is not feeling as well as he was accustomed to feel. Very little perspicacity leads him to the conclusion that probably his body has failed to do its work properly during periods of rest or sleep, for a time which may be much longer than would appear on the surface.

If he be of an ambitious disposition he will resent not only any retrograde tendency, but also the slightest deceleration in his rate of progress.

In either case it were better if he did not wait before taking action until his senses informed him that damage had been caused, but arranged his life-routine so that it

should include periodical checks of his subjective technique.

The simplest method appears to be that once a week (the day and time to be chosen to suit individual leisure) an hour should be occupied as follows:

Let the subject rest in the approved position; take no step whatever to promote any particular form of activity of any kind, either objective or subjective; merely observe all that takes place automatically, with the object of detecting any tendency to inefficiency. Any such tendency once detected is easily remedied with a little attention and concentration, and the remedy should be applied regularly until the desired correction is effected, and the body can be relied upon to do its work as it should be done, automatically.

When this weekly watch has become a habit the subject will discover, if he be possessed of normal powers of observation and the will to make use of these powers, that beyond the mere performance of the usual subjective work to which his attention has been so far devoted, he is the seat of a number of phenomena which so far had not impinged on his consciousness.

He will gradually widen his field of consciousness, and therefore the field in which he can exercise conscious control. His interest will be awakened, he will feel the explorer growing within himself, and as such, he may derive some encouragement from the platitude that an explorer who does not explore does not discover.

Explorers are independent. They like to make their discoveries their own way, but as they advance into unknown territory, they are generally at some pains to make enquiries concerning what they may expect to find next in the unseen that lies before them. In making such enquiries from the natives they may meet, they do not expect comprehensive descriptions of the promised land in all its flora and fauna, but they expect such descriptions as they may gather to be sufficiently defined to enable them to recognize general landmarks and peculiarities.

A rough outline of what the explorer may expect to discover as he invades successive regions of the subconscious may not be out of place.

He enters upon his voyage of exploration of the subconscious realms in the attitude of the most perfect quiescence he can achieve, physically, mentally, emotionally and spiritually.

What then is his state of consciousness?

At the outset, he will notice that those things which impinge on his consciousness are objective. They are things of the outside and reach him through his senses. He feels the weight of his body on the couch, the cold atmosphere, his clothes, maybe a tight belt or sock-suspenders, which he proceeds to loosen. He hears voices, noises, the traffic outside. He sees the wall, senses time passing. He dwells in time and space, his consciousness is nourished on relatives.

This state may be termed objective consciousness.

For a while this state endures; the subject continues to receive impressions from the outside; his perceptions merely reflect the reactions of his senses to the objective world.

After a time the vividness and intensity of these outside messages weaken, and eventually, although the objective world still continues to act on the subject just as before, his senses no longer seem to function, and outside all appears silence and peace.

There follows a period of apparent blankness, during which the subject's consciousness does not seem to be affected by any phenomenon. This period varies in length from subject to subject, and from time to time, and its characteristics are also more or less marked.

It is merely a period of transition (as careful observation will establish), and is occupied in the gradual transference of energy from objective to subjective processes.

Under wakeful conditions, the amount of energy devoted to subjective processes is just sufficient for the current needs of the system, and these processes are not carried out in a manner sufficiently vigorous to attract the subject's attention to their performance. Moreover, the subject's attention is generally fully occupied at such times in the observation of objective activities.

When objective activities are reduced and eventually cease the energy saved is gradually transferred to subjective

work. This is intensified, and gradually attracts the attention of the subject.

When this has fully developed, the consciousness becomes exclusively engrossed in the inside sensations of the body, to the exclusion of all external perceptions.

The subject has then entered the second state of consciousness, subjective consciousness.

This is recognizable by all, although care in observation and a certain determination to remain conscious are required.

For a while this state endures; the subject continues to receive physical impressions from the inside, he becomes more and more conscious of his breathing, improving circulation and the resulting warmth; he feels this warmth spreading into parts of the body that were previously less warm although he had not been aware of the fact; he is struck by an increasing sense of glow and well-being that seems to spread its beneficent action more and more deeply as the body becomes heavier and heavier. The subject then realizes that his body is asleep, and that its work is being performed extremely well although he himself has remained awake.

As the intensity of metabolic processes increases it tends to reach a level of power at which they appear to be outside the reach of the subject's observation, or so one would conclude from the fact that gradually his consciousness of them completely vanishes.

Within his physical self, apparently, all has become silence and peace, just as a little previously, outside, all had become silence and peace.

There follows a second period of apparent blankness during which the subject's consciousness does not seem to be affected by any phenomenon.

This is merely a period of transition, and is marked by the gradual transference of energy, increased in quantity through rest, from satisfied physical processes to mental processes. Gradually the consciousness of the subject which has, by now, completely lost sight of both objective and subjective physical phenomena, becomes aware of the fact that he is still *aware*, but aware of nothing physical, aware

of himself, obviously, since he is aware of the fact that he is aware, and yet is aware of nothing of the body.

When this has developed, the consciousness becomes exclusively engrossed in mentation, in the self merely being and acting metaphysically.

The subject has then entered the third state of consciousness; self- or super-consciousness.

This also is recognizable by all, but all will not reach it at the first attempt. Until they do, they are at liberty to deny both its existence and its accessibility, but it were charitable to warn them that such denial will offer insurmountable obstacles to their attainment of it.

Fierce determination to remain conscious (although, to all outside appearances, fast asleep) and great concentration are essential.

For a while this state endures; the subject becomes more and more clearly aware of his existence as an individual, apart from his physical shell, he experiences more and more definitely what he may feel must be true contact with his self, his soul; and out of this experience he may evolve a conviction of survival after the physical death which nothing will ever endanger. That such conviction is of value none who has ever experienced it can deny, as it seems capable of turning a life of gloom and despair, an existence overladen with a sense of injustice, unfairness and chaos, into a whole of beauty, in which the three score years and ten normally spent in a vale of tears are a mere interlude of arduous schooling, a schooling that can be faced the more cheerfully for this certainty of the unending and untrammelled beyond.

Gradually this state of self-consciousness, as all its predecessors, seems to elude the subject, and if he then is fortunate enough to retain his consciousness, he may enter the fourth state of consciousness: one-consciousness.

Anyone who has ever been blessed enough merely to set foot on the threshold of this plane of consciousness is not likely ever to forget the indescribable sense of beatific revelation it engenders.

All that may be said, the only feelings one may attempt to describe, concern only the aftermath. All one can venture

to speak about (and that only with diffidence and a sense of inadequacy), is the impression left on the self when the experience is over, and a few lines written at the beginning of Chapter 2 of this book under the fresh impression of one such revelation may here be repeated:

'At times, however, in flashes, in blinding shafts of light, illumination flushes in, flooding our consciousness. We seem in one instant divine, to leap to understanding of things as yet undreamt, to vault in but one second the dense barriers of ages, to pierce in one fierce burst the veils of generations, and then fall by the way, dazed by the revelation, rejoicing though, beyond the force of words, that, knowing not what we have known, we should still know beyond the pangs of doubt, that in one spark we had known All.'

What is left after that? The sense of oneness with the Infinite, the sense of at-one-ment with the true, the just, the unending, the unlimited, the sense that one is part of that whole, and that whether it takes years or days, ages or seconds, the time will come when the consciousness of that oneness shall be our patrimony, a consummation that is worth waiting for.

Also the sense that perhaps that consummation is not so far distant after all, as in our moments of doubt and blindness we seem inclined to fear, the sense that perhaps to-morrow may see the dawn, that any day may see it, and that therefore the keynote of our life can be, and must remain, hope. The sense that all is right, however wrong it may appear, and that our chief business in life is to learn to see it as it is, and to make it appear what it is, right.

Chapter 13

POLARITY AND TELEPATHY

The principles of conscious evolution so far described, would suffice the individual, were it not for the fact that other beings have on his progress, its rate and direction, an influence from which he cannot altogether escape however strong and masterful his personality.

The art of controlling one's activities, objective and subjective, so that they shall all tend to one's own highest good, might be sufficient were one the only man on this planet, or the only one whose fate mattered to the gods.

As all individuals act on, and react to, each other, control is essential of one's actions and reactions, objective and subjective, so that they shall all tend to the general good.

Only that is good which fosters life, in self and out of it, in man and beast and plant. The smallest hurt to life, in act however vain, in thought even still-born, is evil.

We act on each other, by speech, touch, the written word. This is a platitude. A platitude is a crime, it makes truth distasteful. There are things we must not do, say, write, to our neighbours. We must not kill, we must not injure, we must not insult, we must not libel, we must not hate. These things are evil.

We must love our neighbours. We must help keep them alive, do, say, write, kind things, to and about them, and we must mean these things. Everybody knows that. Platitude of platitudes!

Even small things are important.

Atoms, electrons, plus and minus, negative and positive, currents, waves, amplitudes, magnitudes, velocities, frequencies, poles, terminals, vibrations, vibrations by the million and the million million per second, and a thousand other electric concepts, all are important, for, after all,

does not the self live, act, manifest, through its body, and is not the body made up of atoms with all that implies?

As individuals using quasi-electrical instruments—our bodies—how do we act on, and react to, each other? Under what laws, by what methods, at what distances?

As answers to these questions are suggested, experiments will be described, which will enable the student to produce and check facts.

On these facts conclusions can be based by the student himself, either confirming or negativing the answers given to the various questions.

Currents continually enter and leave the human body. Their exact nature will not here be examined. These currents are of opposite signs, which means that the forces circulating behave in different manners.

As a general rule, the right side of a Right-hander is positive, the left negative; the left side of the brain positive, the right negative; the top of the spine positive, and its base negative, and these polarities are reversed in left-handers.*

If this be true, it follows that if two human bodies occupy certain positions relatively to each other certain attractions and repulsions should occur.

Let us take two right-handed subjects of either sex. Let them stand opposite each other, not more than a few inches apart. All muscles should be as relaxed as possible, so that their automatic reactions can be easily observed. This applies most particularly to the leg muscles. The sides of the body of opposite pole are facing each other. A few minutes of observation will show that the right knee of one subject is attracted to the left knee of the other, and vice versa; that the muscles of the legs tend to increase their relaxation, and that similar reactions take place in other parts of the bodies.

When the two subjects are placed back to front, the sides of the body of identical pole are facing each other. The knees repel each other, bending forward in one case, and tightening back in the other.

* For a comprehensive discussion of "Polarity and Telepathy," refer to *Co-operative Healing* by L. E. Eeman (Daniel).

When the two subjects are back to back, the sides of the body of opposite pole are again opposite each other. Attraction once again manifests in the legs.

When the two subjects clasp each other's hands, right in left, observation shows a general sense of nervous and muscular relaxation, indicative of natural flow of current.

When this is reversed (left hand clasping left, and right clasping right), nervous and muscular tension are apparent, with a general sense of discomfort, often instinctively expressed by the most inexperienced as: 'No! this is all wrong,' and indicative of incorrect polarity.

When one of the subjects holds the ankles of the other, left to right, and right to left, correct polarity, relaxation, comfort, well-being, the sense that all is right, are experienced.

When this is reversed all the reactions are reversed, tension, discomfort, irritability, the sense that all is wrong, are experienced.

Bearing in mind that subjects temperamentally different are likely to evince reactions more or less marked, and that in a few cases reactions may be barely noticeable, patience and perseverance with experiments are advisable. But when subjects with strong reactions are obtainable, results leave little doubt.

The above experiments appear (if their results be positive) clearly to establish lateral polarity in the body.

A second set of experiments confirmatory of the first, may be undertaken. Let the two subjects selected, be definitely right-handed and left-handed.

With two such subjects all the experiments described above may be tried. All reactions will be the opposite of those previously secured.

One conclusion alone can be drawn; that the sides of the body are of opposite poles.

Having established this much regarding the body, one may then make use of the hands, the polarity of which is known, to establish the polarity of the two sides of the brain.

For the first series of experiments, two right-handed subjects of either sex should again be chosen. Let one lie

down in the approved position, hands clasped, etc. Let the other rest his hands on either side of the head of the first. Let the position be reversed. Let the hands be applied in turn to different parts of the head or face, skull, forehead, eyes, ears, nostrils, etc. The more one goes into detail, the more clearly polarity is shown to accord with the known nerve tracts.

Reverse reactions will once again be observed if one subject be right-handed and the other left-handed.

One conclusion alone appears possible regarding lateral brain polarity.

Regarding the vertical polar axis, that from head to feet, let the experiments be made with two right-handed subjects of either sex. Let one subject lie down in the approved position, and let the other sit on his or her right side.

Let the sitting subject (whom we shall call the operator) rest the palm of his left hand (negative) on the forehead or any part of the head of the subject (positive), and the palm of his right hand (positive) under the base of the spine of the subject (negative). The exact positions can be varied all the way up and down the spine, but as long as the hands are not reversed, the reactions are what would be expected—comfort, peace, relaxation.

To reverse the relative position of the hands, the operator sits on the left hand of the subject. All reactions are reversed.

One conclusion alone seems possible: on the vertical axis, the head is positive, the feet are negative.

Experiment then with either a left-handed operator or subject, or both in turn. Positions can be varied, but reactions confirm the law.

Complete and detailed description of thousands of experiments would need several volumes, and much can be left to the inventiveness of an enquiring student.

But of what utilitarian value is this?

Healing by the laying-on of hands is practised consciously and deliberately by a great many. A greater number still make unconscious use of the method, and actually do good by it without being aware of the fact.

Devoted husbands lay hands on their wives' aching

heads, mothers on the bruised limbs of their children, lovers hold hands all the world over.

Let anyone who does any of these things remember that both he or she, and his or her associate, are either right or left-handed, and let them test by experiment whether the laws of polarity do or do not determine the nature of the results obtained.

Provided they give each attitude a few minutes' trial, they will soon discover that reversing the relative position of the hands completely reverses the reactions of both the operator and the subject, that one position removes pain, calms, soothes, heals, and that the other irritates, exacerbates, and produces tension which in time becomes unbearable.

The spread of wireless has familiarized the general public with the facts of radiation, and this familiarity enables one to use wireless terms in order to make clear some new conceptions concerning the human organism.

Every single part of the body is connected with some part of the brain, and the severance of the nerves connecting the two, entails the immediate paralysis of any limb or organ so disconnected.

Those parts of the brain which send motor orders to certain parts of the body all make use of a common 'cable', the spinal cord.

To use terms of railway engineering, the spinal cord abounds in 'junctions' and 'points'. In different places, nervous lines branch off from the main line to serve outlying districts. In the railway world such points and junctions are controlled by intelligent beings, whose function it is to direct each train on to a particular line, a function they could not perform unless they could distinguish one train from another.

It is not suggested that any such function is performed at the nerve-junctions and points by an intelligence gifted with the selective ability of a railway signalman. Nevertheless, in health, a brain message intended for the right little finger, reaches that right little finger and has on it the requisite effect, but has no effect at all on the left big toe, or any other part of the body.

The hypothesis is advanced that the fact that the message, which is intended for the right little finger, does reach that finger in the absence of intelligently controlled points or junctions, is due to the method of 'sending' used, a method with which there is no need of any intelligence to control points or junctions.

The method of transmission used by the brain may be, not that of the telephone operator, but that of the wireless operator, working on selective wave lengths. When the part of the brain controlling the right little finger sends a motor message intended for the right little finger, it does so on a wave length which in health, is the joint property only of itself and that particular finger. That message is, as it were, broadcast through the whole nervous system, but only that listener which is in tune with the broadcasting station, i.e., the right little finger, picks it up.

If this be so, the nerves themselves are not essential to the transference of any message at all. Their function is that of power transmitters, power which is used by the little finger for the performance of the work asked of it in a message sent to it by wireless.

This may account for the failure of certain brain messages, which are just as clear and definite as earlier messages had been, to elicit any reply from tired limbs. The broadcasting station has not stopped, nor is the listener necessarily out of tune with it; he still gets the message, but the power supply on which he draws for the execution of messages has run down, or connection with it is interrupted.

If this be true, the mere reloading of an exhausted nervous battery by contact with one highly loaded, will restore to a tired or paralysed limb the power to execute messages it still receives and understands, but can no longer obey owing to lack of power.

Such a phenomenon is obtained when an operator possessing a high nervous potential, lays hands on a subject of lower potential, in compliance with the laws of human polarity.

Science accepts the existence of a range of vibration-frequencies extending from less than one a second to an indefinite number in excess of thousands of millions per

second, with wave lengths in inverse proportions. This eliminates any fear that the number of brain centres actively engaged in wirelessing messages to different parts of the body may be greater than the number of distinct wave lengths available.

Bringing into contact two human bodies of different potential, due regard being paid to the laws of human polarity, results in more than a mere transference of power from the body of high potential to that of low potential. Whatever wireless messages are being sent by the high potential brain to the high potential body, and received by the latter, are either received by the low potential brain and distributed by it to the low potential body, or received by the latter directly.

A description has been given of how the human trunk reacted to the thought of colour in the order of the spectrum. This series of reactions to thoughts of colour can be used to prove that when messages are sent by a high potential brain to its own body, these messages spread beyond that body, and are liable to be picked up by any other body; in other words, the colour reactions of the trunk can be used to establish the reality of telepathy.

Let the subject relax in the approved position.

To eliminate the possibility of suggestion or collusion (for no one attempting to demonstrate a new conception is ever free from accusations of malpractice and dishonesty), the subject may be blindfolded.

Let a system of signals be arranged by which the experimenter can communicate his thoughts to others in the room. Let the raising of one finger signify red, two, green, and three, violet; or alternatively, let a red, green, or violet piece of paper be shown.

When a definite colour has been chosen, let all the spectators concentrate on the thought of it for some time. It will be observed that, with a sensitive subject, the appropriate trunk reactions in breathing are produced, and the subject himself is able from his own sensations to 'guess' what colour has been thought of. As many as 24 such 'guesses' in succession, without a single miss, have been obtained. What is more, correct breath reactions to colour

and other thoughts, have been elicited from dogs, cats, and other animals.

Experiments can be varied, but a complete record of thousands of such experiments seems of less value to new investigators, than experiments mapped out by themselves.

The conclusion seems obvious: wireless messages between living beings are facts constantly repeated, though seldom observed.

For those experiments where direct contact is recommended, as by the laying-on of hands, contact by wires may be substituted without invalidating results. This method has the advantage that since the operator's ends of the wires can be kept out of sight of the subject, the latter is unable to discover whether right or wrong polarity is applied, and his reactions are therefore free from all suggestion.

In connection with the various experiments suggested above, the use of a sphygmograph* on both operator and subject, jointly or separately, will make clear some changes that may not otherwise appear.

Another field of exploration which seems to open up new possibilities is that in which immunity from disease is connected with the study of vibration. It is known that certain subjects are naturally immune from definite diseases, and that where such immunity does not exist naturally it can be secured by vaccination or inoculation.

The credit for this immunity is generally given to processes described as mechanical, but it is suggested that although mechanical in appearance, they are fundamentally electrical, and are based upon electrical, atomic, vibrational changes, which in turn produce the mechanical changes observed.

Experiments are suggested the object of which is to establish the above theory indirectly, by proving, firstly, that the cure of a morbid condition can be considerably stimulated by purely bio-electrical methods, and, secondly, that immunity can be secured by them. No particular disease is specified, since the wider the field of exploration, the more conclusive and valuable the results.

* An apparatus to record heart beats.

Let a test be made of the blood of a sufferer from a given disease. Let an operator be chosen whose blood clearly shows immunity from this disease. Let him lay hands on the subject (attention being paid to polarity) for as long as the operator is able to stand the resulting exhaustion. Thirty minutes will exhaust most operators.

Let blood tests of the subject be taken after each session. Let the experiments be repeated with wires instead of with contact by hand. Let blood tests again follow each session. Let the same experiments be repeated once again, but no contact of any kind being allowed, the operator merely pointing his hands at the subject's body, the left pointing at a part of the subject's body higher relatively to his spine than that pointed at by the right, both operator and subject keeping relaxed. Once again, blood tests after each session.

If positive results are obtained, one must conclude that bio-electricity underlies healing and immunity, and that it performs its task either with or without contact. If this be so, what makes it possible?

Every one of the ninety-two elements has its own spectrum. Every unit of matter has its own vibration and radiation. This holds good whatever the combination in which various elements are assembled, be this a lump of sugar, or a bacillus. It holds good also of vaccines, antitoxines, antibodies, and all agencies that side with the organism in its fight against disease.

The striking of a given note on a piano elicits an echo from the identical chord in any other piano within sound reach. This is due to identity of wave length. Two chords strained to identical wave lengths and frequencies may have distinguishing characteristics in the matter of amplitude (potential). Should the one with the greater amplitude be sounded sufficiently long, the time will come when the echoing chord of lower amplitude will snap. Its wave length and frequency will be altered radically, and from the sound point of view, it will become a different entity. It used to be one of Caruso's 'parlour tricks', to pick up a champagne glass, tap it so as to get its note, and sing this note back into it, at a higher amplitude (potential), with the result that the champagne glass flew into fragments.

Failure to strike the right note, i.e., the right wave length and frequency, or lack of the high-amplitude, would have left the glass immune.

In healing and immunity by bio-electricity, contact between the body of an immune subject of high potential (amplitude), and that of the victim of a specific complaint, produces a similar phenomenon. The higher amplitude atomic vibration of the immune subject, functioning with identical wave length and frequency to those of the disease organism, tends to disintegrate the latter.

In this case, as in that of sound waves, contact is not necessary, and when it exists, it is only apparent; the difference between contact and no contact being only one of appearances, and due to the inefficiency of our sensory organs which give us the illusion of contact when we touch and of no contact when we see or hear. In none of those cases is there any immediate contact, and all we register is the reaction we offer to external action, be this close or distant.

A last experiment is offered to investigators, and in order that neither they nor their subjects shall be in any way affected by suggestion, no indication whatever will be given as to the specific results the experiment may yield, and it is recommended that the subject shall be blindfolded before the experiment begins and given no hint as to what is to take place.

The blindfold subject is asked to sit at a table on which two piles of books, each about four inches high and a foot wide, support his forearms from elbows to wrists. These piles are about a foot apart so that when the subject's hands dangle in the well between the books, his finger tips hang loosely about two inches apart. When he has settled down comfortably in this position, he relaxes, detached in mind, and makes no attempt either to move or to restrain his hands.

A coin or other small object is then placed on the table between the subject's fingers and the operator sits down opposite the subject, also relaxed, and stares fixedly at the coin. In many cases results occur rapidly, but at times more than half an hour is required to produce specific effects.

When results are obtained, these will be of such a nature that the scientific curiosity of the investigator will demand sustained research on lines which need not be drawn for him, and it may suffice to hint that physicists may be led to make use of the terms 'magnetic' and 'electric fields' in connection with eyes and hands.

When investigators experiment as suggested, whatever terms they may use to express their surprise at the results obtained, they agree that these have demonstrated action at a distance, and that they have done so in the absence of suggestion. When they repeat their experiments with new operators and subjects, they dismiss even telepathic suggestion as an explanation of the facts, for different operators could not separately conceive, let alone unconsciously broadcast, identical patterns of hand behaviour so that blindfold subjects might unconsciously reproduce these patterns.

Thereafter, investigators are ready to consider the probability that eye radiations are the only possible cause of these unpredictable hand reactions, and, having gone thus far they are even willing to envisage the possibility that radiation might be the explanation of even telepathy itself. However, before committing ourselves to such an hypothesis, let us examine the factual evidence which is available in the matter.

Amongst the documents gathered by psychical research societies none throw clearer light, negative as well as positive, upon the possible 'modus operandi' of telepathy than do the records of cases of apparent 'psychic' or 'astral' travel. To some investigators these records suggest that the psyche can leave the physical body during more or less prolonged periods of more or less total unconsciousness (whether this is caused by sleep, trance, hypnosis, swoon, epileptic fits, drowsiness, intense concentration, physical injury, psychical shock or the approach of death, etc.), and that during these periods it travels to one or more, more or less, distant places. During those displacements, the psyche (according to Yogic and similar teachings) communicates with the physical body by means of the 'astral cord', an indefinitely extensible conductor which fulfils between

psyche and body functions similar to those of the umbilical cord between mother and fœtus. Once in these places the psyche may leave there traces of its passage either in objects (telekinesis) or minds (telepathy), or it may gather matter or information. To a second group of investigators, these records suggest not a displacement of the psyche to more or less distant places, but the production by it of physical or mental effects at these remote places by means not specified. To yet a third group, both explanations of the facts, displacement of the psyche or telekinesis and telepathy, are acceptable.

If we wish to keep an open mind in the matter, we must realize that unless a brilliant experimentalist demonstrates that psychic travel is a material impossibility, or an equally brilliant philosopher shows it to be untenable even as an hypothesis, we must be restricted by the possibility of psychic travel in our search for the modus operandi of telepathy.

If we have both body and psyche, and telepathy is a fact, communication is theoretically possible between psyche and psyche, body and body, and psyche and body, with unfathomable mutual repercussions. But, we have no means of knowing which sends and which receives, or whether both do both, both ways, or whether there are one, two or even more telepathic techniques. Knowing that the nervous system has been evolving for millennia and that material wireless has reached its present efficiency in but a few years, it is illogical to suggest that telepathy must be a supra-physical faculty, exclusively.

If, in addition, the psyche is detachable, over short or long distances, in partial or total unconsciousness, for short or long periods, we are not only incapable of locating either emitter or receiver, at any time, by reference to the location of either or both bodies at the approximate moment of communication, but we cannot even time either emission or reception. Less still can we compare the 'volume' and 'definition' of reception of the same message at different distances from the sender, or the efficiency of different receivers.

It follows that the statement that telepathy cannot

involve radiation 'since it escapes the law of the inverse square which radiation does not' is wishful thinking. If an attempt is ever made to base such a notion on an experiment, it must be remembered that if radio waves (or thought waves for that matter), were only as long as the Equator, we, and the B.B.C., might receive our own messages timelessly and, having apparently overcome the inverse square law, think ourselves in eternity.

Whether or not it is eventually proved that telepathy, or some form of it, uses radiation, the argument concerning hair which is mentioned in the introduction (p. 16) and which was expunged from the first and second printings of this book, is now reinstated as a relevant contribution to the discussion.

If we believe that telepathy is a fact, we must look within the body for its organ of registration. If we further accept that radiation may be the 'modus operandi' of telepathy, we must first consider organs which display similarities with the apparatus found necessary in radio.

In receiving sets, the first means of detection is the aerial which 'traps' radio waves, and it is to be noted that an aerial is used in emission as well as in reception. It is here suggested that the function of the aerial in wireless reception (and diffusion) is fulfilled by hair in telepathy. At first sight this suggestion may automatically trigger-off a conditioned reflex of orthodox superciliousness, but if the reader will but weigh the following arguments he may find that, though not conclusive individually, collectively they are at least suggestive of a previously unsuspected truth:

(1) Most nations look upon women as the more intuitive and man as the more logical member of the pair. Women used to wear long hair, and the tendency for them to wear it shorter coincided with the more masculine and realistic outlook which they adopted after the first world war. Shorter hair coincides with less intuition and more logic in woman.

(2) Amongst the males of all nations, those who depend on intuition and inspiration, artists, painters, sculptors, poets, dreamers of all kinds, philosophical, scientific, religious, political, allow the hair to grow long. Is this an

answer to the sub-conscious urge to provide the organ of inspirational telepathy with a longer and more efficient aerial? Jesus with cropped hair and Hindenburg with a long mane are incongruous. Montmartre, the Three Arts, the School of Rome, with short hair, and an army, be it British or Prussian, with long, will shock many besides the sergeant-major. Short hair coincides with less intuition and more logic in man as well as in woman.

(3) Hair, or the dominant mass of it, in both man and animals, is located in greatest density around the brain, roughly indicating its outline.

(4) When it goes beyond the brain surroundings, it extends first to the region of sensory organs: eyebrows and lids, nostril hair, ear hair, mustachios and beard surrounding the organs of taste, the finger and toe nails (basically hair), the tentacles of various animals, insects, fish, crustaceans, etc. All these are sensory instruments and may, *ex hypothesi*, fulfil dual functions, one mechanically sensory and the other radiesthetically so. It is worth noting that the pubic hair, the sex 'aerial' between male and female, appears later than does the hair which is related to the brains, eyes, nose, ears and mouth. Significantly, it seems, it is made ready to receive sex signals from male to female, and vice versa, just as puberty prepares the genital organs of both to reproduce the life that is already dying in both before either has reached maturity.*

(5) It next expands along the spinal cord, in the shape of a mane and ends in the longer and presumably more efficient aerial of the tail, all carrying telepathic waves via the afferent nervous system to the brain in which one expects to find the organ of telepathy.

(6) When the survival of the individual demands that instruments for the reception and appreciation of danger signals shall be most efficient, when known sense organs are acutely alert, then also, both in men and animals, the hair (another sense organ?), or its different counterparts, stand on end.

(7) In certain pathological conditions such as fever, the period of high temperature coincident with liberation, con-

* See Chap. 1, page 31.

sumption and dissipation of energy, during which hair lies flat, is followed by a period of cold, shivering, low vitality, a call for recharging with energy by all possible means. Then the hair of the whole body stands on end (goose flesh), putting out aerials to gather energy from the ether, until the supply, having once more become normal, can in turn normalize blood temperature. Incidentally, it must here be pointed out that the notion that hair is merely a vestigial instrument for the direct control of blood temperature does not account for all the facts (such as long hair around the brain, spine and tail?) whereas the 'aerial' hypothesis does account for them all including indirect control of blood temperature by means of the direct control of energy intake.

(8) The notion that hair is essential to the exercise of spiritual or super-normal faculties or powers, though not their organ, is part of various religious teachings, ancient and modern, folk-lore, ancient traditions and myths, e.g. the capacity to keep in touch with higher powers, communicating with heaven or God; certain sects, Hindu and others, forbid the cutting of hair, the old Chinese pig-tail by which its owner is to be drawn up to Heaven, the symbolical or historical tale of Samson, the dedication of the unborn prophet Samuel (1 Samuel i, 11).

After the aerial, the hair, where in the brain can we find a possible telepathic detector? It might be argued that since all matter is capable of resonance, all brain cells are potential wireless receivers, but most brain structures seem unsuited to the function of detector, with one exception: the pineal body or gland. The following points may in their aggregate turn possibility into probability:

(1) The pineal gland, a brownish body, the size of a pea, occupies a central position in the brain, and contains sandy, gritty crystals, often described as brain sands, and to which no function has so far been assigned. As, however, they are almost invariably present and nothing that is constant in nature is purposeless, and as no known function fits such crystals as closely as that of detectors, the hypothesis is here advanced that they are our telepathy detectors. The suggestion that through neglect of our telepathic

faculty, its instrument, the pineal crystal detector, is now merely vestigial, does not invalidate the hypothesis.

(2) In some of the lower vertebrates, the pineal gland has the appearance of an undeveloped third eye. Whether at this stage of evolution this is the active instrument of a slowly evolving new sense or merely the vestigial instrument of a long-lost faculty, the presence within the light-proof shell of the skull of an instrument designed on lines adapted to the detection of light or other ether waves suggests speculation as to whether or not it functions as a detector of either infra-red or ultra-violet waves, or both.

(3) Mental products of creation, inspiration, revelation, intuition, hardly ever reach their receivers ready clothed in words, but generally first impinge on consciousness as 'undressed' images. This emphasizes the need of an organ such as the pineal gland appears to be, and words of Wordsworth which imply this need as 'supersensed' by the poet, are worth quoting:

'Nor less I deem that there are Powers
Which of themselves our minds impress
That we may feed this mind of ours
In a wise passiveness.'

(4) From time immemorial the pineal gland has been deemed the organ of revelation, intuition, the 'seat of the Soul', by countless sects, cults and religions, all over the East, and Descartes faced a good deal of ridicule in his steadfast championship of the theory.

(5) It is of interest to note that not only in Christian churches but in the temples of other faiths, in stained glass windows, and in paintings, the Godhead is frequently portrayed with a third triangular eye in the middle of the forehead, 'the All-seeing eye', an eye credited with the faculty of seeing 'through' matter, seeing spiritually, seeing through the ether, vision at a distance (by means of waves? television), that this triangular All-seeing eye also happens to be one of the outstanding symbols of free-masonry, an institution the origins of which are lost in the backgrounds of time and whose symbolism has remained unchanged for ages immemorial, and it is suggested that this general adoption of this symbol by races, sects and

nations, otherwise unconnected, merely reflects the subconscious realization by mankind of the possession by man of an organ capable of 'non-material' vision, vision without the normal eye, and the natural 'sequitur' that an anthropomorphic deity should be no less well equipped. Man has not yet evolved any god to any image but his own, any advantages ever credited to the deity over man involving merely questions of proportions.

(6) Abnormalities of the pineal gland are often found at post mortems on mental cases, and without advancing the disturbing theory that the pronouncements of the inmates of our psychotherapeutic institutions are inspired by the 'Powers which of themselves our minds impress' of Wordsworth, we may underline some stimulating platitudes:

> 'In their unbalanced way, some madmen occasionally produce flashes of brilliance.'
>
> 'Genius is akin to insanity.'
>
> 'The prophets of to-day were the despised madmen of some earlier age', and
>
> 'The crucified saviours of our age, the men of evil of past orthodoxies.'

To those who are fortunately within a legally defined borderline, the humbling thought may do good, that those demented through some abnormality of an as yet little understood ductless gland, may on occasions, and owing to that very abnormality, both perceive and enunciate truths which to those whose glands are more normally balanced must remain out of reach, but which at some later stage of human evolution may rank amongst the spiritual axioms of the race.

(7) If, as has been suggested, the pineal gland plays a part in the control of growth, we must note that it could perform this function whilst acting as a radio detector. It would then influence growth not by virtue of its own inherent qualities, but by re-diffusing to the growing child waves emitted by its parents, by other adults, or even by discarnate entities, all operating on suitable wave lengths. These relayed waves would then promote within the growing child arrangements of atoms and cells either similar to

those ruling in the bodies of the broadcasting adults or to those conceived by progressive minds, truly rulers of evolution, either embodied or discarnate. In such a method we should see only variants, on a higher plane, of 'Chladni's figures'* (circa 1800) in which specifically changing sound vibrations alter in strict parallelism the patterns formed by mounds of dust on taut drums.

(8) To followers of creeds which imply belief in revelation, inspiration or intuitive perception of metaphysical truths, the possession by the inspired subject of a suitably refined and tuned instrument of reception of the verities broadcast by higher beings is an implied necessity and no human structure appears to be more specifically designed for the purpose than the pineal gland.

However, apart from the pineal gland, which we may perhaps think of as the specialist for the detection of waves emitted by psyches (whether embodied or discarnate), we might argue that numerous other structures in human bodies, down to cells and atoms, are capable of detecting waves emitted by their counterparts in other human bodies, by resonance, a capacity inherent in all matter. For instance, it is conceivable that, say, disorderly action of the heart in one individual may elicit similar disorders in the hearts of others in the absence of either direct physical contact or communication by normal sensory channels.

* Chladni, Ernst Florens Friedrich (1756–1827), German physicist who, inspired by Euler and Bernoulli, became a pioneer in acoustics. His discoveries concerning the dust figures (called Chladni's figures) formed on drums vibrating in resonance to different sound frequencies are well known. Napoleon was so impressed by his demonstrations that in 1809 he financed the translation of Chladni's book *Die Akustik* into French.

Chapter 14

CONCEPTION OF EVOLUTIONARY STEPS

The law of life is: God-ward evolution.

This law holds good on all planes. It applies to the angel, the man, the animal, the good and the bad man, the saint and the sinner, the genius and the half-wit.

It does not take into account how high an individual may be on the scale of intelligence or morals.

All it asks is: 'Is he going up or down? Low or high, degraded or noble, is he better to-day than he was yesterday? Is he better adapted to the performance of his share in the work of evolution God-ward; is he getting nearer to the appreciation of the fact that "the Kingdom of God is within"?'

The answer to these questions can only be given as an answer to further questions: 'Is this individual, such as he is, more keenly aware than he was yesterday of the fact that he needs daily improving knowledge and understanding of the law of life? Is he applying the knowledge and understanding gained more and more religiously? For this is the one true religion.'

If to these questions, the answer 'Yes' can be given, even though it may be qualified with: 'But he has many tragic lapses on the way, many falls, many failures'; that individual is going forward, moving God-ward, though, perhaps, slowly. But what matters that? He is taking himself and his species one step nearer the goal.

But if the answer must be given: 'No. In all things, daily, consciously and wilfully, or blindly and in ignorance, he breaks the laws of life; he does not foster life in himself or in others, he actually hinders and restricts it. He will not seek, he will not learn'; then that individual is going backwards, making for death, though, maybe, slowly. But what

matters the rate of his descent? He is taking himself and his species one step down the incline that leads to the elimination of a type, as useless in the scheme of creation. In this process of elimination the law is inexorable: it eliminates the offending individual without allowing him to reproduce his kind, or allows him to reproduce only stock marked with the stamp of his breach of the law, stock to which ultimately either tenure of life, or the power to reproduce, shall be denied.

The law is inexorable, for a law that allows of exceptions is only that part of the law which limited understandings comprehend.

But the law is just and merciful. At no time will it deny a single soul the right to change its ways, the right to seek for light, the right to find it when it seeks, the right to act in that same light, the right to reap from that same act, reap to the full extent; for the law of life is love of life, and whenever love of life is manifest in one being, however lowly, life acts through that very being with the fullness of its power in measure as that very being allows it free-play.

Sin is the breach of the law of life. The sinner is he who breaks the law of life. But there shall be more rejoicing in Heaven . . . if the repentance be given the practical form of obedience to law.

Man, free to explore ever deeper within himself, must, if he explore at all, realize that he can initiate within himself no change likely to result in his evolution into a better instrument for the manifestation of the God in him, except by the creative power of thought.

He cannot make himself into anything better or greater, unless he first of all creates in his own mind, complete to the last detail, manifest to the intuitive eye, the being that must one day come to life.

No fate ever befalls man, the pattern of which contains one single strand to which his hand is a total stranger.

What is more, if the mind of man be held sufficiently singly on a supreme pattern, free enough to change at every step with his advancing understanding, he shall, in time, evolve into the pattern itself, and find in so doing he has truly created the weaver of better patterns still.

This principle is old, was old when it fell from the Son of Man in Galilee: 'All things, whatsoever ye ask and pray for, believe that ye have received them, and ye shall have them'; it was old before life on this earth had grown into man.

And difficult as it might have been for Adam to accept as possible the powers made manifest by his descendants of to-day; it must be difficult for us to accept as possible the powers that will be made manifest by descendants less distant from us in time, than we are from the head of our stock, the powers even, that we may ourselves manifest in our own generation.

Difficult as it may be for the individual to accept as possible powers which he may to-morrow manifest, it is fundamentally impossible for him ever to manifest those powers unless he first of all succeeds in accepting them as possible.

Evolution is a slow process, not because the actual process of evolving must of necessity take apparently unending time, but because of the rooted difficulty the evolving being finds in conceiving, visualizing, and accepting as possible, the very next step, let alone more distant advances.

Man dare not conceive, create. He dare not believe that he can speed up evolution, become the conscious architect of a being with powers more considerably in excess of his present powers than these exceed those of the ape; that he is able to advance more in a few years, than his ancestors have advanced in the last two thousand.

His problem lies in the conception of evolutionary steps. Let us face it.

What does it behove man to make of himself? What manner of being must he place before his creative mind, that he must become?

He must remember that he must needs evolve within his physical instrument of expression, the body.

He must, therefore, conceive, visualize, and accept as his, a body, that will perform not only admirably, but in an ever improving manner, every single function which is to-day expected of the human organism at its best. He must think of himself in creative terms of function-performance

of the health-perfect athlete, housing an efficient and cultured mind.

He must make this the fundamental part of his religion. A perfect frame, a highly adapted and adaptable instrument is the *sine qua non* of his evolution.

He must not rest satisfied with the conception of himself as possessed of a physical instrument which performs perfectly every single one of its physical functions, be these conscious or unconscious, motor or sensory; he must deal creatively with the possible evolution of powers deemed beyond his reach, and kept beyond it, only by that very conception.

He must go much further. He must train himself to conceive himself as performing or exercising, through his instrument, the body, functions or faculties the performance or exercise of which must, for the time being, appear to him relatively at least as miraculous as the conception, design, construction, and operation of the wireless telephone would have appeared to Adam.

But in facing the possibility of his evolving in a comparatively small number of years into a being who will simply, naturally, do things which are ranked to-day as 'occult', 'miraculous', 'supernatural', he must understand that whatever 'miraculous' or 'supernatural' facts may be, they are neither miraculous nor supernatural.*

Either the 'miracles' with which the Son of Man is credited in the Gospels did or did not take place.

If they did, it does not follow that their performance involved either breach or temporary suspension of law. To make it appear to an individual or set of individuals, that breach or suspension of law were involved, it would suffice to select individuals ignorant of the law, or cognisant only of a part of it. To discover, to-day, a large group of individuals ignorant not only of the laws of wireless, but of wireless itself, is a simple matter; and to such individuals, wireless must be a 'miracle'.

* For the sake of simplicity arguments concerning 'the miraculous' are given concrete applications only in connection with Christian miracles, but it is to be understood that these arguments apply equally to 'the miraculous' in other Faiths.

It is unnecessary to assume that only by a supernatural and 'unlawful' intervention was the Son of Man enabled to do the wonderful things he did. It is sufficient, simpler, and more natural, to accept that his beholders did not know the whole of the law, any more than we do, but that he did. This view is supported by the Master himself, for after performing wonderful deeds, he placed before his—as yet—untutored followers, the prospect not only of their emulating him, but of their doing 'works' actually 'greater' than his own. In doing so, he specified that the Law should be fulfilled if they but believed 'on him', and, presumably, in what 'He taught them in private'. That those things which 'He taught them in private', were instrumental in equipping them for the performance of those very works which they formerly looked upon as 'miraculous' and outside the province of man, is evidenced by the fact that when he had gone, his work accomplished, he left them equipped with both the knowledge and power requisite for the daily performance of the very self-same 'miracles', a power and knowledge which they then exercised almost as a matter of routine.

We do not know a hundredth part of the laws that govern life, and the assumption that anything which goes beyond that law, such as we know it, is above or outside it, is tantamount to the assertion that our intellects do know and comprehend the whole of the law, and is sheer arrogance on our part.

Neither the highest nor the most learned dignitary of any church has the least shadow of a right to declare that any single one of the acts of the Son of Man in any way involved either breach or suspension of the laws of God or nature, any more than the most scientific of sceptics has the faintest justification, either in fact or in logic, for the assertion that the 'miracles' related did not take place because they do not happen to fall within that portion of the law which he understands.

Both attitudes, that of acceptance of 'miracles' as miraculous and that of denial of 'miracles' as unlawful, rest on the same inferiority complex: 'I cannot do this thing, therefore no other man can . . .' Here the two schools

divide. One school simply declares: 'But these things did happen, therefore they must have been done by the special intervention of God in favour of One, Whose accredited representative and successor I am; therefore you must bow to me, for God is behind me, and he who does not accept my doctrine and my rule, is doomed.' But 'these works' they perform not.

The other school is just as profoundly happy in the bland assertion: 'I cannot do this, therefore, you can take my word for it, it has never been done; and what is more, it will never be done, until I do it.'

The ones stand themselves up as the chosen of God, for whose benefit he breaks his own Law, so that they shall have power and rule before the eyes of men. God singles them out as the head of our kind, and woe betide him who does not bend the knee!

The others smile with bland tolerance at all your superstitions, and bid you believe miracles will be, only when they can perform them.

Let us remain within the law. Let us be kind and tolerant, both to God and to nature, and allow, out of the simplicity of our hearts, that it is quite conceivable that They may control forces we have not as yet completely understood. Let us allow that the question is not whether God did, or did not, use 'The' Man in an unlawful way, to do unlawful though wonderful things, but whether man has it within his power, provided '*he*' uses God or nature in fuller knowledge of the law, to perform naturally those very things which he now terms unnatural or supernatural.

In this light much will open itself to us, in the widening of our understanding of the whole law within ourselves, for is it not within that is to be found the Kingdom of God?

One of the very first things that may open itself to us will be that even if it could be established beyond a doubt (which it cannot) that not a single one of the 'miracles' credited to the Son of Man had ever occurred, this would be no evidence that they could not now be performed, or that if they were, this would involve either breach or suspension of law.

What is more, it would certainly be no evidence that it

was not the intention of the Ruling Intelligence from the very beginning, that man, when he had once reached his full estate should perform these very miracles as naturally as he now walks and speaks and uses his five senses.

Man's next advance in evolution must be twofold, and must embrace a widening of both his fields of action and perception.

Any such widening will most naturally take the form of a gradual overcoming of the two relative factors of life, such as we appreciate it: time and space.

That both time and space are relative is now common knowledge, and to most this knowledge must involve the realization of the fact that real or absolute action or perception over-ride both time and space.

In other words, the first obvious widening of man's functions and faculties, need not involve the evolution of either functions or faculties new of themselves, but merely the performance or exercises of existing functions or faculties on a different plane of consciousness, such performance or exercise demanding first of all a creative mental visualization of, and belief in, their attainability.

A widening of his motor and sensory fields of activity such as is here adumbrated, would imply on the motor side, that man would no longer be limited to action on the objective world by actual contact with his immediate neighbourhood, but would without the help of external or connecting apparatus, be capable of exercising force at a distance.

On the sensory side it would mean that man would no longer be limited to seeing, hearing, smelling, tasting, touching, within a limited and definite range, but would, without the help of external or connecting apparatus, be capable of exercising his sensory faculties irrespective of distance and space, and of the lapse of time normally required to cover the distances involved. Phenomena answering to the above description, have been labelled telekinesis, telepathy, clairvoyance, prophecy, etc.

They are occasionally produced consciously by specially gifted subjects, abnormally evolved operators of the human organism, and unconsciously by those who happen to be

the fortuitous witnesses of spasmodic manifestations of the human wireless sense within themselves.

A comparison between the phenomena described above and a large proportion of the 'miracles' ascribed to the Son of Man, not only brings out the similarity between the two series of events, but makes acceptable the fact that where they are produced at all, this does not involve either breach or suspension of the Law. This conception has the unqualified support of the Master himself, in his assertion that he had come to prove and confirm the law, and not to destroy it, or make it appear ridiculous.

'Miracles' ascribed to the Son of Man and not covered completely by the above, such as walking on the waters, deeds of healing, the raising of the dead, cannot either, on the strength of his own words, be looked upon as outside or above the law.

All that is apparently required for their performance by man, is that he should have a sufficiency of faith. The Master states that the capacity for walking on the waters, healing the sick by divers means now looked upon as occult, raising the dead, and other 'miracles' too numerous to mention, is latent in the ordinary man; and can be exercised by him provided he first of all develop the power mentally to visualize himself performing them, and unhesitatingly accept the manifest possibility of his doing so. This is all Faith amounts to, as is made manifest in daily life; for no man can even blow his nose if he lack the necessary faith, and accept the insane fancy that the act is beyond his powers.

Such men are to-day segregated as mentally deficient, as are others who indulge in the negative conviction that they are incapable of performing some of the simplest acts. The thought is not without humour, that when the common man shall have acquired the knack of seeing through walls (his understanding of the weaknesses of others having remained relatively as confined as it is to-day), he will with perfect logic and consistency, and no doubt, within the code then ruling, incarcerate any one sufficiently lacking in commonsense, to hold the conviction of prehistoric ancestors that nothing in this world can make him see through a wall!

Walking on the waters need not involve the over-riding of the law of gravity, any more than flying does. It merely assumes knowledge by the walker, of means of applying the whole law.

Healing the sick, either by direct contact or at a distance, does not involve the over-riding of the laws of health or life; it can only prove and confirm the law. It merely assumes the possession by the healer of an organism functioning in entire obedience to the very laws of health and Life, or in the enjoyment of a degree of obedience to law in excess of that of the subject to be healed, coupled with the capacity to make this very life vibrate at a sufficiently high amplitude to call up in the ailing subject the dormant faculty of human wireless, and elicit from his instrument the appropriate resonance.

Raising the dead, either by direct contact or at a distance, cannot involve the over-riding of the law of life, any more than any other 'miracle' ever could, without making God, his Messenger, and the law, ridiculous. It rests on knowledge and power, and on belief on the part of the subject in his capacity to perform a function which only his doubting inhibits.

This could not have been written with more complete reverence for both God and nature, and their laws, or a more whole-hearted detestation for anything that makes either appear ridiculous or absurd, inconsistent or fitful.

It rests on the firm support of the Master's assertion that he intends to prove and confirm the law, and his all-enlightening declaration that the law lays it down that to perfect faith even the removal of mountains shall be as child's play. This simply means that the one essential prelude to any form of activity outside or above that which man daily manifests, is the mental act of conception, creation, belief, acceptance, all utterly unhesitating. This is the essential prime mover of any evolutionary advance that may rest in the womb of time.

Walking on the waters, healing the sick, raising the dead, far from being miraculous and involving either breach or suspension of the law, should be looked upon merely as proof and confirmation of the law in its entirety. What is

really miraculous and goes to prove that we are constantly breaking the law, or by our blindness or ill-will holding it in constant suspense, is that we do not exercise our latent capacity for walking on the waters, that there ever are any sick to heal, or any dead to raise.

If man is to reach his full estate and manifest the powers latent in him since his appearance on earth, he will do so only in the light of ever increasing knowledge of the law of life, knowledge acquired as the result of the constant seeking of it within himself, and its constant and religious application whenever he has grasped any new portion of it.

He must appreciate that before he can exercise or enjoy any new development of any existing function or faculty, he must learn mentally to conceive, create, visualize and accept, such new development as a patent reality.

He must also appreciate that any failure to do so, *ipso facto* destroys any chance of any such development ever taking place in him, and that the conception of any thought involving decadence or retrogression, must of necessity produce these.

He must appreciate that he is not alone of his type on this planet, that he is a social being whose actions on his fellows have proportionate reactions on himself.

Bearing in mind that of all his activities, thought about himself and his own evolution is by far the most pregnant of good and evil for himself, he must appreciate as a *social* being, intensely subject to sympathy and sympathetic reactions, that, of all his actions on his fellows, thought about them and their own evolution is by far the most pregnant with good or evil for himself.

This will be made clear to him when he observes that he cannot think of another running or swimming, without sympathetically generating within his own nervous system the very reactions which normally follow the thought of himself running or swimming. It will be made clearer still when he realizes that he cannot think of another as a liar, a thief, a murderer, a traitor, without sympathetically generating within his own nervous system the very reactions which normally follow lies, thefts, murders, treachery, or the thought or consciousness of himself being

a liar, a thief, a murderer, a traitor; and as a result, suffering the mental and emotional distress associated with these thoughts, and their unavoidable sequel: interference with the smooth and gentle flow of life within him.

He must appreciate that it is a wise policy, whilst detesting and abominating lies, thefts, murders and betrayals, both in himself and others, clearly to separate in his mind those detestable acts from those persons unfortunate enough to succumb to their temptations, so that having freed his thoughts of those persons from all ingrained and insurmountable association with inveterate evil, he will find it natural, whilst detesting the evil itself, to understand, forgive and love the evil-doer.

He will then find it still easier and more natural to go on loving the evil-doer, if he but take thought on himself and analyse the curious fact, that wholeheartedly as he may have come to detest his own tragic collapse before temptation in moments of distress, he nevertheless manages to preserve a lurking sense of love and appreciation for himself as a very estimable gentleman.

Having discovered that his own thoughts about his neighbours have a definite effect upon himself, and that therefore it behoves him ever to make and keep these thoughts as pure and good as loving care can make them, he will not rest content, but will unearth in the converse of this conception a new and worthier motive on which to found and sustain his love for his neighbour.

Not only have his thoughts and feelings about his neighbours definite reactions on himself, but even unspoken and unacted, they have on his neighbours, and not only on those on whom his thoughts are centred, but on all those within thought-shot, a definite though less sensible effect.

Not only are his thoughts about colour clearly received by his neighbours, and clearly reacted to by them, but (as experiments carried out on the lines indicated in connection with the transmission of colour thought-vibrations from individual to individual will show) his emotional and mental states and changes are just as easily and naturally transferred to, and made manifest in, others.

Doubt on this point must exist in many minds, but it

cannot survive honest, searching experiments. Doubt once eliminated, the conclusion forces itself on the seeker's mind that we all constantly act on, and react to, one another by thought and feeling, even in the complete absence of any expression of these thoughts and feelings.

With this conclusion is coupled this other: where the holding by ourselves of a certain thought or feeling has on us the effect of interfering, even if only temporarily, with the smooth and gentle flow of life within us, and thereby tends to inhibit or interrupt our progress as an entity evolving God-ward, it follows that a reaction of identical tendencies may be produced in a number of our fellows.

On these conclusions can be founded, not the selfish motive for right-thinking and feeling warranted by earlier conclusions, but one altogether altruistic, and as such pregnant with greater and nobler possibilities.

We can neither define nor limit the field of action of vibrations generated by our thoughts and feelings, nor have we any reason to assume that this is negligible, and it is both safer and sounder to rule our conduct on the assumption that it is potentially unlimited.

Guided by the knowledge that Doubt deprives us of the powers we doubt, Despair destroys any incentive to use them, Hate completely paralyses all that is good, creative, and fruitful in us; we shall appreciate the cardinal fact that we can hold neither Doubt, Despair, nor Hate, without tending to paralyse all that is good, creative and fruitful in others.

We shall realize that this holds good most especially in the case of those who are dearest and nearest to us, as they are of all human beings the most likely to be in 'wireless tune' with us, and therefore the most likely to be injuriously affected by anything which we allow mentally, morally, or emotionally, to injure us.

Through this we shall understand that Faith, and Hope, and Love, are the very breath of our life, the very staff of our power to evolve.

We shall understand further, that Faith in our capacity to manifest the 'miraculous' powers latent in us from the dawn, to manifest these powers in the conscious application

of a law consciously 'known'; that Hope that the day of these powers is not so far removed, and that this generation may see this day; that Love of all men by all men, Love of animals, Love of all Life wherever we find it; that this Faith, Hope, and Love are absolutely essential to the evolution of mankind, and that the continued lack of them must of necessity lead to the destruction of our civilization.

We shall know that this Faith, Hope, and Love must of necessity animate and vitalize individuals and be by them consciously developed and experienced, before we can reasonably expect that they shall be made manifest by groups and societies formed by those very individuals; just as we cannot reasonably expect the greatest architect to build a good and sound house out of bad and unsound bricks.

POSTSCRIPT, 1956

Dear Reader,

You have just come to the end of the book I completed early in 1928 and then submitted to two publishers, who, between them, induced me to condense my MS. by about 25 per cent. This was good advice, but in addition they insisted that I should withdraw my philosophical introduction to it and a theory on the mechanism of telepathy. I gave in, but since then I have never ceased to deplore my lack of moral courage in agreeing to the emasculation of my MS.; and the present publication of the original document, with its fundamental ideology and argument intact, is an attempt to atone for my weakness and pacify my conscience, an attempt which I am making with the wholehearted support of my present publishers.

However, unless you have already put some of the suggestions in this book to the test of experience you may well say: 'This is mere theory, and theory of the nineteen-twenties at that! Has the author no new observations or hypotheses to discuss?'

Since those early days I have indeed gathered much new material, both theoretical and factual, and have written about some of it in various books and papers. In one of the latter* a guilty conscience compelled me to say that: 'The most important thing in life is to have the moral courage to be oneself, whatever the risk. . . . Fear paralyses, but with courage one can always go on seeking.'

At this very moment, to be myself, I must frankly acknowledge the motives which ever since 1919 have driven me to seek, to speak, to demonstrate, to write, and to go on

* "Interim report after 35 years of research", delivered before the British Society of Dowsers on the 20th October, 1954.

doing so undeterred by anything which might deflect me from my purpose. To many, this may read 'blind fanaticism', but, in fact, life had used her own experimental method, long enduring pain of body and mind, to build up my certainty and determination. Since 1920 my conviction has steadily grown that my health and sanity had been saved by the conscientious application of theories which I had begun to evolve in 1918. And, inescapably, with that conviction has grown the sense that I must give to others what has spelt life to me.*

Although the fundamentals on which my theories rest have not changed, the theories themselves have continuously evolved since 1919 and must go on doing so. As they have now become integrated under the title 'Co-operative Healing', I will here give a brief outline of that system, under separate headings.

Health†

It is normal to want health, to want to be 'fit'. But fit for what? Sport, writing, sculpture, marriage, or just 'fit' to die? Different fitnesses are adaptations to different objective functions and they are, at times, so mutually exclusive that they cannot be integrated into one wholeness! And yet, health implies wholeness.

In theory, man could reach absolute health, never ail, age or die, or, by implication, even need reproduction. But he could do so only through the perfect function of all his parts in relation to each other, and of his total self in relation to other selves, all more or less adaptable and all functioning in an ever-changing world.

In practice, since the knowledge of the law of life needed for such perfection is beyond his reach, man can hope to find only relative health. In order to achieve even that little, he must attempt either to adapt himself to function perfectly in his changeable environment, or so to transform his world as to make it the perfect frame for his evolution and that of the race.

* See my Preface.

† See *Radio-Perception* Vol. XII. No. 86. December 1954 Creative Faith.

So far, we have left these parallel evolutions to chance. To plan them intelligently we must first concentrate on yet a third evolution, that of our present conception of the 'whole' man of, say, the year 4000. We might begin by appointing an international council of our 'best minds' to inspire us with their conception of what 'homo sapiens' could make of himself, in the next 2,000 years; man himself, that is: not his gadgets, or his bombs, or his drugs. And we should ponder the fact that in the very process of deliberately day-dreaming about our highly evolved descendants we would begin to change ourselves. But whether we concern ourselves with individual or racial development, whatever success we may achieve in either field will ultimately rest on function, for it is the basic axiom of evolutionary science that it is function that produces the organ, and not vice versa; that it was light that gave us the eye.

The trinity of function

Everything that functions does so on three planes:

(1) mechanical;

(2) dynamic; and

(3) control.

No analogy is perfect, but it will help to convey my meaning if I compare man with a motor-car with

(1) its engine;

(2) its petrol; and

(3) its driver.

Man has (and please note the dualism on man's three planes):

(1) his organs and limbs;

(2) his nervous and muscular energies; and

(3) his mind, sub-conscious and conscious.

Since 1919 I have looked for anything which either could function on fewer than three planes, or would need more than three, but in vain.

From the trinity of function it follows that disease can be caused only by dysfunction on the mechanical, dynamic or

control planes, or by a compound of any two or all three of these.

It also follows that 'wholeness' cannot be found by any one-sided mechanical, dynamic or psychological approach, unless the cause of dysfunction is itself comparably one-sided (no such case has come to my notice in thirty-six years) and that it *can* be found only by an integral mechanical, dynamic and psychological approach.

It further follows that whenever any one of the three approaches is totally neglected, no matter how excellently the other two are used, a cure, i.e. a return to wholeness, remains impossible until the neglected third is itself introduced, consciously or unconsciously, deliberately or accidentally; with the corollary that if it is introduced unconsciously or accidentally, credit for the patient's cure may be given to a consciously introduced but totally inoperative factor.

Thirty-six years of experience have conclusively proved that the life force which is so easily provided in the 'Healing Circuit' is often the 'neglected third'. It remains unsuspected because the materialist denies its very existence *a priori*, and then consistently credits suggestion for the cure actually performed by the unseen 'virtue'.

Finally, it follows that however powerless the missing third may seem, unaided, its introduction may release wholeness and do so in a more or less miraculous fashion, or, to borrow Dr. A. T. Westlake's definition of the miraculous, more or less 'outside of time!'*

Use versus repair

All that functions goes through the cycle: 'use—repair', e.g. the car is used, and then repaired, in a workshop.

The body is used, and then healed, in sleep.

Use and repair are mutually exclusive, e.g. the mechanic must 'switch off' the engine *before* he can begin to repair it.

The patient must relax his voluntary muscles *before* he can begin to heal his body in sleep.

* See: "Vis medicatrix naturæ" by Dr. A. T. Westlake, *Proceedings of the Scientific and Technical Congress of Radionics and Radiesthesia, London, May* 16-18, 1950.

But, just as 'taking the brake off', though an essential preliminary, is not driving the car; and just as 'switching off', though an essential preliminary, is not repairing the engine; so relaxation, though an essential preliminary, is not healing the body.

'Driving' and 'repairing' are both activities of 'trinities of function', but the trinities involved are different trinities: 'car, driver and petrol' and 'car, mechanic and neuro-muscular energy' where, as is most common, the driver and the mechanic are two different people using respectively 'electricity-plus-petrol-vapour' and 'nervous-energy-plus-muscular-power', energies which are not only different but of different orders. Against that, the use of the body in the objective world and its repair in sleep involve the self-same trinity of function: 'the subject's organism (organs and muscles), his mind (sub-conscious and conscious), and his energies (nervous and muscular)'. Briefly, whereas the car is repaired by an external mechanic, man repairs himself.

Energy

All schools agree that healing presupposes:

(1) bodily relaxation;

(2) energy; and

(3) a positive attitude of mind, often called 'faith'.

Though these schools exercise mutual tolerance over the problems of relaxation and right-mindedness, Materialists and Mechanists are to-day as ruthlessly scornful of Animists and Vitalists as ever they have been since Hippocrates and Jesus.

We know that the whole of the material universe is composed of atoms, all bi-polar, and yet the mere idea that plants, animals and men, all made of bi-polar bricks, must be bi-polar structures and may well give off radiations or emanations, seems absurd to the materialist. Though he usually laughs to scorn both the suggestion that such radiations may be healing and the injunction to 'heal the sick by the laying-on of hands', healing-hand radiations are no more preposterous than are the brain radiations recorded

by the encephalograph. Does not our knowledge of resonance suggest that it might operate between the waves of an infectious fever and those of its anti-toxins though they might perhaps be out of phase?*

What evidence can we gather that living structures are bi-polar?

Individual behaviour

Let us observe what individuals do spontaneously and unconsciously in situations that suggest insufficiency of energy. Muscular contraction, conscious or unconscious, inhibits functions such as breath and blood circulation and causes fatigue. This in turn calls for relaxation which makes the energy that maintains contraction available for healing work. But, in the hypothesis that we are bi-polar, man loses the energy so released by radiation, mainly through his hands and feet, the bi-polar terminals of his nervous system. To stop this loss of vital energy by radiation, Nature gives him the instinctive urge to *rest* with his hands clasped and his feet crossed when old, sick, tired and/or cold, just as we connect the two poles of a horseshoe magnet with a keeper-bar. Cats, dogs and other animals often link not only their paws but also their heads and tails. Healthy children, having an energy surplus for growth, sleep with their hands and feet spread-eagled, their *poles apart.* They can afford the loss involved until they get ill, when they too link their poles. And buttercups, daisies, water-lilies and other flowers also connect their opposite poles when the sun goes down for the night or hides behind cloud.

Behaviour of pairs

A mother holds her baby with her hands (plus and minus poles of the horseshoe magnet) linked with the head and the base of the spine of the baby (plus and minus poles of the keeper bar-magnet) and according to whether mother and/or baby are right- and/or left-handed, she promotes peace in one polar relationship and tension in another.

Two people in love, facing each other at a tea-table, may

* See *How do you Sleep?* and *Co-operative Healing* by L. E. Eeman, (Daniel).

spontaneously link hands and feet and find pleasure in doing so, but if one of them is right- and the other left-handed they must link hands and feet right to right and left to left.

If an infectious fever subject links hands and/or feet with one immune to his fever, his temperature falls appreciably in a short time.

When a healer forms a closed circuit with a bruised patient who has suffered extravasation of blood and *discolouration*, by laying both hands on him, one on the bruise and the other on the nervous tract between the brain and the bruise, a silhouette of the healer's hand and fingers appears, generally within half an hour to an hour, in paler skin, on the background of the multi-coloured bruise.

Group behaviour

The energy which flows between opposite poles (plus or minus hands, feet, heads and sacra) when they are in direct contact also flows between them when they are linked by suitable conductors. Influenced, as we are, by two centuries of electrical practice, we are apt to jump to the conclusion that copper wire is the best conductor of nerve force as it is of electricity. Nerves are the lineal descendants of vegetable fibres through millions of years of evolution, and neither nerves nor fibres have ever been made of copper. The microscope shows that nerve fibres are closer to wool, silk, cotton and other animal and vegetable fibres than to copper, and it is suggestive that 1,900 years ago 'virtue' was conducted from the body of Jesus through a garment, probably wool or cotton, to a woman who held its hem. That silk was a better conductor of the life-force than copper was first scientifically demonstrated by Dr. Baron von Reichenbach before 1850, and my attention was first drawn to his writings in about 1935 by the late Dr. Hector Munro, then by the late Dr. O. Brunler in 1938, and then again by Dr. A. T. Westlake in 1948.*

Finally, I would emphasize, firstly: that thanks to this conductibility, what happens with pairs in direct contact

* See *Proceedings of the Scientific and Technical Congress of Radionics and Radiesthesia, London, May* 16-18, 1950.

also happens, but more effectively, with groups in the Co-operative Healing Circuit; secondly: that through millions of years nerves (non-cupreous fibres) have conducted WITHIN animal bodies the same energy which non-cupreous fibres now conduct BETWEEN human bodies in the Co-operative Healing Circuit; and thirdly: that to make it possible to repeat the above experiments and many others, often enough to give them statistical validity, steps are being taken to place the Co-operative Healing Circuit within reach of increasing numbers.

L. E. Eeman.

CO-OPERATIVE HEALING

The Curative Properties of Human Radiations

by L. E. Eeman

With an Introduction and an Appendix by
J. Cecil Maby, B.SC., A.R.C.S., F.R.A.S., B.S.D.

In simple language the author shows experimentally that human radiations can be used to cure disease. When we strike the middle C on a piano, a piano near by answers back, illustrating the law that matter both radiates and responds to any radiations which it can itself emit. It has been demonstrated that the brain radiates, and here we are shown not only that man responds to human radiations, but how we can co-operate in using these to heal one another.

This book will grip all those interested in healing—and in radio and radar—and it should induce the medical profession to reconsider its attitude to unorthodox methods of healing.

L. A. G. Strong says:

This book records certain experiments and their results.

Whether the theory advanced to account for them be true or not, the results suggest possibilities of the most far-reaching kind, and it is important that further experiments be made to test them.

Extract from pre-publication reports:

This is a strangely challenging book and one which demands very serious investigation.

The author has a theory which he has tested in accordance with his belief and according to his means. The theory is basic radiation—and there is no reason against it. Always allowing for tradition and prejudice.

There is nothing more outrageous in this thesis of his than there was in wireless in 1910. And there is nothing essentially fallacious in his theory of radiation—not after uranium.

In a most interesting scientific way it explains many physical phenomena that have been known down the ages to Eastern sages. Relaxation, self-engendered heat, etc. It is a provocative book and doubtless the old school of M.P.s will scoff at much of it, but given intelligent investigation by younger and open-minded men, the principles should influence future medical treatment to a very powerful degree.

I should like to see this theory developed, proved, and published, because, if it can be substantiated, it is not only important, it is of the first importance . . . This is something akin to Galileo.

CO-OPERATIVE HEALING

Some Press Opinions

The sub-title of Mr. L. E. Eeman's new book *Co-operative Healing* is "the curative properties of human radiations"; it sums up his twenty-four years' study of the effects observed when persons are linked by wires in circuits designed to balance positive and negative polarities in the human body. No electrical charge is put into the circuit, any effects are due to the body itself. One form of circuit is found to promote relaxation, another, tension. Further, a healthy person—Mr. Eeman claims—can transmit a tonic influence to a sick person, and a drug introduced into the circuit will have a characteristic influence on bodily reactions. . . .

He has tried repeatedly and vainly, he says, to secure a thorough medical testing of his work. It ought to be tested, many responsible persons have testified to its therapeutic value, and it might yet throw useful light on that wide field of radiesthetic phenomena which a few enterprising doctors are beginning to explore.

C.D. in *The Observer.*

The successful doctor of the future must needs be priest as well as physician. The centre and core of Mr. Eeman's thesis is the fundamental unity of creation, and he has established by experiments repeatable at will that disease may be spread in certain cases by radiation, as well as by the way of contagion and infection. Thus it is true that every personality may be influenced for good or ill, "not only by other personalities, but by animals and things, and in manners, and degrees which we do not at present credit". Professor J. B. S. Haldane has written: "The progress of medicine is proving that it is a biological fact that we are members one of another. This is true even for our own domestic animals . . . a sick animal may be a menace, much more a sick man, woman, or child." The reality of the unity of all sentient life—indeed, of the whole universe—has been known to every seer and saint of history, but it is now admitted by the world's most advanced scientists. In the same way that no part of the human personality can suffer derangement without detriment to the whole of society, so, conversely, does the condition of society react upon the health of each one of its separate members.

Anti-Vivisection News Sheet.

The orthodox medical scientists will be tempted to dismiss Mr. Eeman's book unread on the grounds that its theory and practice are too extravagantly unorthodox, or, perhaps even more because its methods and findings point the way towards a phenomenal simplicity in treatment—the utilization of the basic electronic forces which are a function of organic life. Fortunately for Mr. Eeman's theories, the most recent advances in biophysics have placed the existence of such forces beyond all dispute, though the pioneers in their investigation, such as Abrams and Starr White, were subjected to the most devastating ridicule when they suggested that the human body was made up of aggregations of electric systems capable of emitting and receiving high frequency radiations. Today, we have the Electro-encephalograph, capable of measuring and recording such radiations when emitted as "brain-waves". The aura of the mystics and spiritists has been shown by Reichenbach, Kilner and others, to be an electrical field surrounding, and of origin in, the living body.

The physiologist Crile has demonstrated the bi-polarities of living cells and organs, and has even demonstrated that the brain emits visible radiations. In addition to radiations of organic origin, cosmic physics has shown that there exists a multitude of radiations of cosmic origin, *plus* their secondary or refractive radiations when impinging upon soils of different constitutions, or upon water. All such radiations are capable of affecting the organism. In fact, according to Lakhovsky, the cellular organisms subsist, as it were, in resonance with such radiations. Support for this theory comes from the study of the effect of sun-spots (the major source of variation in cosmic radiation) on various organic processes in nature.

Mr. Eeman has worked out a technique whereby the radiations of the human body can be utilized therapeutically. Using the known polarities of the different parts of the human body, and linking positive with negative, he has shown, either in a single subject, or in a number of subjects linked in series, that it is possible to produce a state of relaxation which has curative properties. His experiments have almost completely eliminated the possibility that the results could be due to suggestion. Hypnosis is not used, the subject being conscious unless the degree of relaxation induces sleep. The opposite series of connections—i.e. positive with positive, or negative with negative—produce the opposite effect, a feeling of tension that frequently becomes unbearable. Other of his experiments, observed by a group of competent doctors and scientists, show that a particular drug, linked in series with the subject, or subjects, will, within two minutes, or less, produce in the subjects its characteristic physiological effects when taken internally.

Irish Times.

THE PREDICTION OF THE FUTURE

A New Experimental Theory translated from the French of Pierre-Emile Cornillier

By L. E. Eeman

6s.

Writing in his Preface to the first edition of this book (1935) the translator says:

I believe in a supreme intelligence, a cosmic order, a soul-life apart from this bodily existence and exceeding it. Like many who share these views I have often tried to reconcile two convictions I hold intuitively, in spite of my inability to base them soundly on pure logic.

Experience has driven me to the disheartening conclusion that I cannot reconcile the idea of prophecy, or the faculty to predict the future, and the idea of free-will, or the freedom from all such prediction, and that yet I cannot help believing both are true . . .

I began to read *La Prédiction de l'Avenir* (*Nouvelle Théorie expérimentale*) respectfully, and with undoubted interest, but still with the same old feeling that in the end I should put down the book still unable to reconcile the idea of prophecy and that of free-will.

I had read much less than half the book when my mind became filled with an irresistible light and the abiding conviction that P. E. Cornillier, if he had not given me the whole and complete truth, had undoubtedly set my foot on the one road at the end of which it would appear.

* * * *

When the second edition appeared in 1947, L. E. Eeman in his Preface wrote:

When the first English edition of this work appeared in 1935, the author added to the French original a reference to a prediction he had received concerning the late President Franklin D. Roosevelt. This document reached me in September 1935 in a sealed and registered envelope which I immediately deposited, unopened, with the Westminster Bank, for safe keeping.

This prophecy was realised during the war.

Unfortunately, all my attempts to contact Monsieur Cornillier after Germany's collapse failed, and it was not until October 1945 that I heard that my friend had died during the German occupation, on the 12th November, 1942.

I knew it had been the author's wish to publish a second edition of this book as soon as possible after the realization of the "Roosevelt prediction", and I trust that, in its preparation, I have been faithful to the spirit of an utterly sincere seeker after Truth.

In offering this third edition to the reader I cannot offend the modesty of my departed friend by quoting, in support of his work, two men who rank amongst the highest in the annals of psychical research, Camille Flammarion and Ernesto Bozzano.

The great French astronomer and psychical experimenter wrote of *The Survival of the Soul*, Monsieur Cornillier's record of his psychical research:

"I have learnt much from your pages, although my contact with Allan Kardec and his successors dates back to November 1861. From this you may infer that I have seen and heard a great deal. Of all I have seen and heard, your Vettellini is undoubtedly the most remarkable personality. . . . All my congratulations on your persevering work."

The theory presented in this book is based on that work. And, on this theory, the famous Italian authority wrote: "Your fundamental explanation of the prevision of the future . . . is the right one, the true one . . . time will surely prove you right."